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BUREAU OF MINES

MUSEUM BUILDING

14TH AVENUE AND SHERMAN STREET

DENVER 2, COLORADO

ANNUAL REPORT

for the year 1953



WALTER E. SCOTT, JR.

Commissioner of Mines

Publication approved by James A. Noonan, State Controller



BRADFORD-ROBINSON PTO. CO., DENVER

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LETTER OF TRANSMITTAL

June 15, 1954

Honorable Dan Thornton
Governor of Colorado
State Capitol Building
Denver 2, Colorado

Dear Governor Thornton:

In compliance with the requirements of the law, Chapter 110, Section 285 of the Colorado Statutes Annotated 1935, I have the honor to transmit herewith the Report of the State Bureau of Mines for the year 1953.

Respectfully submitted,

WALTER E. SCOTT, JR.
Commissioner of Mines



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**PERSONNEL OF
THE COLORADO BUREAU OF MINES
1953**

WALTER E. SCOTT, JR., Commissioner of Mines.....Central City
WM. HARVEY CHAPMAN, Inspector, District No. 1..Wheatridge
FRED E. THEOBALD, Inspector, District No. 2.....Canon City
JOHN W. DOYLE, Inspector, District No. 3.....Leadville
G. A. FRANZ, JR., Inspector, District No. 4.....Ouray
RICHARD C. GROOM, Associate Mineral Curator.....Denver
KAYE M. B. SULLIVAN, Secretary.....Denver
JOSEPHINE M. IPSEN, Statistician.....Denver
DONNA L. SAMUELSON, Receptionist (to 9-12-53).....Denver

DISTRICTS OF INSPECTION

DISTRICT NO. 1—Adams, Arapahoe, Boulder, Clear Creek, Denver, Gilpin, Grand, Jackson, Jefferson, Larimer, Logan, Moffat, Morgan, Phillips, Routt, Sedgwick, Summit, Washington, Weld and Yuma counties.

Wm. Harvey Chapman

12060 West 52nd Avenue, Wheatridge Harrison 4-0814

DISTRICT NO. 2—Baca, Bent, Cheyenne, Crowley, Custer, Douglas, Elbert, El Paso, Fremont, Huerfano, Kiowa, Kit Carson, Las Animas, Lincoln, Otero, Park, Prowers, Pueblo and Teller counties.

Fred E. Theobald

319 North 12th Street, Canon City 528-J

DISTRICT NO. 3—Alamosa, Chaffee, Conejos, Costilla, Eagle, Garfield, Lake, Mineral, Pitkin, Rio Blanco and Rio Grande counties, and that portion of Saguache county lying south and east of the main Continental Divide, and the extreme northwest part of Gunnison county, lying north of the 39th degree of latitude.

John Wm. Doyle

414 West 7th Street, Leadville Leadville 96

DISTRICT NO. 4—Archuleta, Delta, Dolores, Hinsdale, La Plata, Mesa, Montezuma, Montrose, Ouray, San Juan and San Miguel counties and all of Gunnison county except the extreme northwest corner lying north of the 39th degree of latitude, also that part of Saguache county lying north and west of the main Continental Divide.

G. A. Franz, Jr.

Box 507, Ouray Ouray 61

COMMISSIONERS OF MINES

HARRY A. LEE.....	May 11, 1895—May 10, 1903
E. L. WHITE.....	May 10, 1903—May 10, 1907
T. J. DALZELL.....	May 10, 1907—May 10, 1911
T. R. HENAHEN.....	May 10, 1911—May 10, 1915
FRED CARROLL	May 10, 1915—May 10, 1919
HORACE F. LUNT.....	June 1, 1919—June 1, 1923
JOHN T. JOYCE.....	June 1, 1923—June 12, 1939
EDWARD P. ARTHUR.....	June 12, 1939—August 26, 1943
FRED JONES	September 27, 1943—April 25, 1950
WALTER E. SCOTT, JR.....	May 3, 1950

PUBLICATIONS OF THE BUREAU OF MINES

BULLETINS

- Bulletin No. 1, Recommendations for Safety Appliance in Mining, Harry A. Lee, Commissioner of Mines, 1896.
- Bulletin No. 2, Precious Metal Production for the Year 1898, Harry A. Lee, Commissioner of Mines, 1899.
- Bulletin No. 3, Mining Laws, Relative to Bureau of Mines Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1899.
- Bulletin No. 4, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1901.
- Bulletin No. 5, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1902.
- Bulletin No. 6, Regulations Relative to the Construction, Equipment and Operation of Metalliferous Mines, Mills and Metallurgical Plants, Recommendations and Mineral Production for 1905, E. L. White, Commissioner of Mines, 1906.
- Bulletin No. 7, Federal and State Laws Relating to Mining, Fred Carroll, Commissioner of Mines, 1916.
- Supplement to Bulletin No. 7, Mining Laws Enacted by the Twenty-first General Assembly, Fred Carroll, Commissioner of Mines, 1917.
- Supplement No. 2 to Bulletin No. 7, Amendments to the Mining Laws Enacted by the Twenty-second General Assembly, Horace F. Lunt, Commissioner of Mines, 1919.
- Supplement No. 3 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-third General Assembly, Horace F. Lunt, Commissioner of Mines, 1921.
- Supplement No. 4 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-fourth General Assembly, Horace F. Lunt, Commissioner of Mines, 1923.
- Bulletin No. 8, The Oil Shales of Northwestern Colorado, Horace F. Lunt, Commissioner of Mines, 1919.
- Bulletin No. 9, Mine Safety Standards, Horace F. Lunt, Commissioner of Mines, 1920. Out of print, now embraced in Bulletin 11.
- Bulletin No. 11, Federal and State Laws Relating to Mining, John T. Joyce, Commissioner of Mines, 1931.
- Bulletin No. 12, Mining Laws of Colorado, Edward P. Arthur, Commissioner of Mines, 1942.
- Bulletin No. 13, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1946.
- Bulletin No. 14, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1949.
- Bulletin No. 15, Oil Well Safety Laws, Walter E. Scott, Jr., Commissioner of Mines, 1953.
- Circular No. 1, Location of Lode and Placer Mining Claims, Walter E. Scott, Jr., Commissioner of Mines, 1953.

REPORTS

Report of Bureau of Mines, Colorado, from its establishment in May, 1895, to November 30, 1896, Harry A. Lee, Commissioner of Mines, 1896.

Report for the Year, 1897, Harry A. Lee, Commissioner of Mines, 1898.

Report for the Year, 1898, Harry A. Lee, Commissioner of Mines, 1899.

Biennial Report for the Years 1899-1900, Harry A. Lee, Commissioner of Mines, 1900.

Biennial Report for the Years 1901-1902, Harry A. Lee, Commissioner of Mines, 1903.

Biennial Report for the Years 1903-1904, E. L. White, Commissioner of Mines, 1905.

Biennial Report for the Years 1905-1906, E. L. White, Commissioner of Mines, 1907.

Biennial Report for the Years 1907-1908, T. J. Dalzell, Commissioner of Mines, 1909.

Biennial Report for the Years 1909-1910, T. J. Dalzell, Commissioner of Mines, 1911.

Biennial Report for the Years 1911-1912, T. R. Henahen, Commissioner of Mines, 1913.

Biennial Report for the Years 1913-1914, T. R. Henahen, Commissioner of Mines, 1914.

Biennial Report for the Years 1915-1916, Fred Carroll, Commissioner of Mines, 1916.

Biennial Report for the Years 1917-1918, Fred Carroll, Commissioner of Mines, 1919.

Annual Report for the Year 1919, Horace F. Lunt, Commissioner of Mines, 1920.

Annual Report for the Year 1920, Horace F. Lunt, Commissioner of Mines, 1921.

Annual Report for the Year 1921, Horace F. Lunt, Commissioner of Mines, 1922.

Annual Report for the Year 1922, Horace F. Lunt, Commissioner of Mines, 1923.

Annual Report for the Year 1923, John T. Joyce, Commissioner of Mines, 1924.

Annual Report for the Year 1924, John T. Joyce, Commissioner of Mines, 1925.

Annual Report for the Year 1925 was fully prepared but because of lack of funds was not printed. The manuscript is on file in the office of the State Bureau of Mines.

Annual Report for the Year 1926, John T. Joyce, Commissioner of Mines, 1927.

- Annual Report for the Year 1927, John T. Joyce, Commissioner of Mines, 1928.
- Annual Report for the Year 1928, John T. Joyce, Commissioner of Mines, 1929.
- Annual Report for the Year 1929, John T. Joyce, Commissioner of Mines, 1930.
- Annual Report for the Year 1930, John T. Joyce, Commissioner of Mines, 1931.
- Annual Report for the Year 1931, John T. Joyce, Commissioner of Mines, 1932.
- Annual Report for the Year 1932, John T. Joyce, Commissioner of Mines, 1933.
- Annual Report for the Year 1933, John T. Joyce, Commissioner of Mines, 1934.
- Annual Report for the Year 1934, John T. Joyce, Commissioner of Mines, 1935.
- Annual Report for the Year 1935, John T. Joyce, Commissioner of Mines, 1936.
- Owing to lack of funds the 1936 Annual Report of the State Bureau of Mines was not published.
- Annual Report for the year 1937, John T. Joyce, Commissioner of Mines, 1938.
- Owing to lack of funds the 1938 Annual Report of the State Bureau of Mines was not published.
- Annual Report for the Year 1939, Edward P. Arthur, Commissioner of Mines, 1940.
- Annual Report for the Year 1941, Edward P. Arthur, Commissioner of Mines, 1942.
- Annual Report for the Years 1942 and 1943, Fred Jones, Commissioner of Mines, 1944.
- List of Mines for the Year 1944, Fred Jones, Commissioner of Mines, 1945.
- List of Mines for the Year 1945, Fred Jones, Commissioner of Mines, 1946.
- Annual Report for the Year 1946, Fred Jones, Commissioner of Mines, 1947.
- Annual Report for the Year 1947, Fred Jones, Commissioner of Mines, 1948.
- Annual Report for 1948 was not published.
- Annual Report for the Year 1949, Walter E. Scott, Jr., Commissioner of Mines, 1950.
- Annual Report for the Years 1950 and 1951, Walter E. Scott, Jr., Commissioner of Mines, 1952.
- Annual Report for the Year 1952, Walter E. Scott, Jr., Commissioner of Mines, 1953.

FOREWORD

The Bureau of Mines of the State of Colorado was established by an Act of the Tenth General Assembly, approved March 30, 1895. This Act repealed the previous Act creating an "Inspector of Metalliferous Mines" which was passed in 1889. The Bureau of Mines law established the office of the Commissioner of Mines, authorized by the Colorado State Constitution in 1876 (Article 16, Section 1) and charged the Commissioner of Mines, among other things, with the supervision of metal mine inspection and the enforcement of laws relating to health and safety in metal mines. Subsequently, this Act was broadened to include "any ore mill, sampling works, smelter, metallurgical plant, rock quarry, clay pit, rock excavations, tunnels or mine workings of whatever kind or character, except coal mines."

The Thirty-sixth General Assembly in 1947 passed an Act requiring, in addition to the above, that the Commissioner of Mines conduct inspections of all oil wells and all property and equipment appurtenant immediately and used in connection with producing oil wells, and further charged him with the enforcement of laws relating to the health, safety and welfare of any person employed at such wells or other property.

The Commissioner of Mines was charged, in the Act of 1895, "as he has opportunity and means" to collect and preserve mineral specimens, to accumulate technical and scientific and other data relating to mining, metallurgy and geology, to examine, report and record the geological formation of important mining districts or of any mine. "As he has opportunity and means," the Commissioner of Mines has authority to undertake any research project which would be of assistance to those engaged in mining or which, in any way, would help develop the mineral resources of Colorado. He is charged with the responsibility of making investigations regarding prospecting, buying, selling, transporting, treating and reducing metalliferous ores and minerals and to record the progress of the mineral industry.

The Commissioner may, from time to time, with the consent of the Governor, and as appropriations may be made therefor, compile, publish and distribute bulletins on subjects, districts and counties; such bulletins when treating of a district or a county shall give in detail the history, the geology, the record of mines and mills, the process of treatment and results, together with a classification and location of mining property and prospects, together with maps of the same. However, a lack of funds over the years has greatly limited these duties of the Commissioner of Mines and many functions of the office have been greatly curtailed and others omitted. In consequence, for many years the first and foremost function of the Colorado Bureau of Mines

under the direction of the Commissioner of Mines has been safety inspection. By inspection and investigations, consistent efforts are made to see that safe practices are used to protect the health, safety and welfare of all men employed in the mineral and other industries inspected by the Bureau of Mines. Records of all accidents are received and recorded, and complete statistics concerning accidents are available for those interested.

More than 600 requests for specific information regarding mines, mining areas, geology, mineralogy and other items are received each year and have been answered by the office of the Commissioner of Mines. While advice and information is freely given to prospectors and small operators in order to further the State's mineral development, no written reports on mines are made and care is taken not to encroach on the proper field of consulting engineers and geologists.

The office of the Colorado Bureau of Mines has a vast store of information and reference material, including complete files of the United States Geological Survey and most bulletins issued by the United States Bureau of Mines. This reference material contains bulletins, monographs, mineral resources of the United States and professional papers. A complete file of geological material published by the Colorado Geological Survey is on file, as is much historical material pertaining to mining in Colorado. In the files of the Bureau of Mines are more than sixteen thousand reports on individual mines in Colorado.

This report would not be possible, nor would some of the work done by the Bureau of Mines, if it were not for the full cooperation of other State departments and Federal agencies. The State and Federal agencies and the persons therein to whom we are indebted has become too large for us to thank each one individually, but we are most grateful to all who have been so helpful.

For their excellent work in the field, the district inspectors are to be congratulated. They have at all times worked long hours under trying conditions and have been most cooperative and loyal.

The compilation and preparation of this report is the work of the office staff and they, also, are to be congratulated for a very fine job.

The publication of this report is authorized by Section 285, Volume 4, Chapter 110, 1935 Colorado Statutes Annotated.

Every effort has been made to assure accuracy and completeness of the data used in the report but changes, due to removal and altered mining conditions, are constantly taking place which may cause some omissions or mistakes to appear in the publication. It will be most appreciated if any additions, corrections or errors are brought to the attention of the Colorado Bureau of Mines.

MINERAL COLLECTION

The mineral exhibit of the Colorado Bureau of Mines occupies three large rooms on the second floor of the State Museum Building. The Mineral Room (main entrance) contains cases showing agate, native gold, silver and copper, and copper, fluorspar, gold, iron, lead, molybdenum, uranium, vanadium and zinc ores.

The East Room contains collections from James Dollison, Florence Hotchkiss, W. L. Leonard and Robert D. Roots, with many cases of non-metallic minerals.

The West Room, among other items, contains a large collection donated by the Colorado Scientific Society and the John G. Morgan and Harry A. Lee collections, besides other cases of rare minerals and ores.

In all rooms are cases which contain specimens from practically every mine of any consequence which was operated in the State from the very early days on. All specimens, except a very few loans, have been donated to the State by persons interested in Colorado mining. The Bureau of Mines has no funds with which to purchase specimens and still must depend upon the generosity of mining people and others to maintain the collection at its high standard.

Each year many very fine specimens are added to the exhibit.

While thousands of tourists visit the mineral exhibit each year, it continues to be of much concern to prospectors, miners, engineers, geologists and persons generally interested in Colorado's mineral industry.

During the year 1953 more than 250 boxes of mineral specimens were sent to schools, school teachers and children who were making collections of minerals for study. Each box contained specimens of the principal metallics and non-metallic ores being produced in the State. Every effort is made to fulfill all requests that are received but a scarcity of some specimens and the cost of mailing has somewhat limited the number of boxes which can be sent. Frequently, a large number of requests come from one school or one locality and, in such instances, we send a number of boxes and hope that the persons fortunate enough to receive the collection will show it to their classmates and neighbors.

MINING IN 1953

Production of gold, silver, lead, zinc and copper decreased heavily in both quantity and value in 1953, according to information furnished to the Colorado Bureau of Mines by the Mineral Industry Division, Region IV, United States Bureau of Mines. The total value of these five metals was \$13,778,357.00 less than the total production of 1952 and was the lowest since 1946.

The price of lead and zinc started to drop about the middle of 1952 and this decline continued until the end of 1953, causing the price of lead to be the lowest since 1946, and that of zinc since 1943. A large number of mines whose principal value was in lead and zinc were forced to close, including two of the State's large producers. One other large mine, near the end of the year, lowered its production of lead and zinc ores and increased its operations in mining pyritic ores containing gold and copper. The lead, zinc mines which continued to operate were either those mines with low costs or those mines which had a high enough value in gold or silver to keep their operations profitable.

A very serious problem confronts many base and precious metal mines not only in Colorado but in all western States. Since the end of World War II all operating costs have continued to rise and the lead and zinc market has weakened to a point of causing many former profitable mines to now be unprofitable. When such conditions exist, every advantage is in favor of foreign mines. They can produce more cheaply than ours because of much lower labor costs, currency depreciation and even financial assistance from the American government under several existing foreign aid programs. The gold miner apparently gets nothing but sympathy from our government and the plight of the domestic gold miner is too well known to go into it in detail. Many of the most famous gold mines of the United States are in Colorado and if they are forced into continued inactivity for many more years, they will become relegated to the legends of the west.

The bright side of Colorado's mining future appears to be in the mining of uranium and other fissionable ores, molybdenum and non-metallic minerals. While no figures are released on the production of uranium as this is restricted by the Atomic Energy Commission, it is evident that the production is large and it probably has an annual value to the State greater than the combined value of gold, silver, lead, zinc and copper produced for any year in the State's history. The principal uranium producing area in Colorado at this time is in the southwestern part of the State and includes the counties of Mesa, Montrose, San Miguel, Dolores and Montezuma. Small amounts of high grade pitchblende have been discovered and produced in the Front Range area, and in the near future, the counties of Boulder, Clear Creek, Gilpin and Jefferson may become the location of many new and extensive uranium ore deposits. The beryllium production for 1953 was double that of 1952, and the production of tungsten and pyrites

both increased in value, and a small production of manganese was recorded. The State has shown a marked increase in the production of non-metallic minerals in the past few years and this increased production should continue into 1954. Climax Mining Company had practically completed their expansion program at the year's end and early in 1954 will be on their new production schedule of 28,000 tons per day. When this new production level is reached, the Climax Mine will become one of the world's largest underground mines.

The principal producing districts of the State in order of output of gold, silver, lead, zinc and copper were —

1. Telluride
2. Gilman
3. Leadville
4. Cripple Creek
5. Rico
6. Ouray
7. Creede
8. Silverton

The leading producers of gold, silver, lead, zinc and copper in order of output were —

GOLD	Golden Cycle Corporation
	Cripple Creek
	Idarado Mining Company
	Ouray
	Telluride Mines, Inc.
	Telluride
SILVER	Idarado Mining Company
	Ouray
	Empire Zinc Division
	Gilman
	Resurrection Mining Company
	Leadville
	Emperius Mining Company
	Creede
LEAD	Telluride Mines, Inc.
	Telluride
	Idarado Mining Company
	Ouray
	Resurrection Mining Company
	Leadville
	Telluride Mines, Inc.
	Telluride
	Empire Zinc Division
	Gilman
	Rico Argentine Mining Company
	Rico

ZINC Empire Zinc Division
 Gilman
 Idarado Mining Company
 Ouray
 Telluride Mines, Inc.
 Telluride
 Rico Argentine Mining Company
 Rico

COPPER The only substantial producer of
 copper in the State was the Idarado
 Mining Company at Ouray.

Among the principal producers of uranium ore were —
 Skidmore Mining Company
 Dove Creek
 United States Vanadium Company
 Grand Junction
 La Salle Mining Company
 Grand Junction
 J. R. Simplot Company
 Norwood
 Climax Uranium Company
 Grand Junction
 Consolidated Uranium Mines, Inc.
 Bull Canyon
 Vanadium Corporation of America
 Durango

This list is far from being complete and none of the companies are listed in any order of output or production.

All molybdenum production in Colorado is from the Climax Mining Company at Climax and the principal tungsten production came from the mines of Boulder County and the Climax Mine, although some small producers are scattered in other sections of the State.

Beryllium ores come from widespread sections of the State but most of the ore produced is processed by the Beryllium Ores Company at Arvada.

The principal producers of fluorspar in Colorado are the Ozark Mahoning Company, the General Chemical Division of the Allied Chemical and Dye Corporation and the Reynolds Mining Company. Feldspars and micas are produced in various sections of the State, with the principal processor of both being the International Minerals and Chemical Corporation.

Colorado's mineral production, except oil, came from 411 metal mines, 72 quarries, 32 clay mines and pits and 19 placers. The processing of ores was done in 62 mills, plants and smelters. Of the 411 metal mines, of which we have complete record, 178 are uranium producers. However, we do know that we were unable to contact all of the mines with our limited field staff. In the uranium area there are many small mines that are so inacces-

sible that we have reason to believe that we were able to visit and make inspections of probably not more than one-half of these mines.

Adams County

Several sand and gravel producers with washing plants along Clear Creek produced gold as a by-product. Among these sand and gravel firms are Brannan Sand and Gravel, Metropolitan Sand and Gravel and the Cooley Gravel Company. Most of the gold recovered from these sand and gravel placers was sluiced and processed by Kerkling and Slensker.

Boulder County

The Caribou Mine at Caribou, near Nederland, produced some rich silver concentrate during the early part of 1953. However, most of the year was devoted to development work, and the sinking of the main shaft was one of the larger projects. The operating company was reorganized late in the year and the new company, Nederland Mines, Inc., hopes to do further exploration on the pitchblende possibilities of the mine. Fire partially destroyed the Wolf Tongue Tungsten Mill at Nederland early in the year but fire damage was repaired by Hietzer Mines Company and the mill was in operation most of the year processing tungsten ores of the district. Cobb and Weldon treated some twelve thousand tons of low grade ore at their Lakewood Mill on North Boulder Creek. Cold Spring Tungsten, Inc. developed an entirely new ore body in the old Cold Springs Mine which they have under lease. Only a small amount of gold was produced in Boulder County in 1953 and this came from two or three small properties. The Ozark Mahoning Company, the General Chemical Division and H. M. Williamson & Son produced fluorspar throughout the year from their mines. As a by-product from the milling of fluorspar ores the Ozark Mahoning Company and the General Chemical Division shipped lead-silver-gold-copper concentrates.

Chaffee County

The Reynolds Mining Company kept their mill at Poncha Springs in full operation with fluorspar produced from their open-cut and underground mines. S. E. and W. E. Burleson shipped zinc-lead-silver-gold ores from the Mary Murphy Mine at Romley. The Monarch Quarry continued to ship large tonnages of limestone to the Colorado Fuel and Iron Corporation at Pueblo. Several feldspar quarries in the county were active during the year and increased the production over the 1952 figures. It was reported that zirconium ore was discovered east of Salida in Chaffee County.

Clear Creek County

Production of gold ore from the Dixie Mine increased over 1952. This ore was concentrated at the company's mill east of Idaho Springs. The Mendota Mine at Silver Plume operated the first four months of the year producing lead and silver and most

of the county's zinc production. A limited amount of silver-lead ore was produced at the Smuggler Mine in the same area. The Grizzly Mine near Bakersville produced throughout the year with most of its lead-zinc ores being treated at the Lupton Mining Company's Commonwealth Mill at Georgetown. Some placer gold was produced from the Cooper Placer at the west city limits of Idaho Springs. The Golconda Mine at Fall River worked part of the year exploring for pitchblende and some small amounts were found.

Costilla County

In Costilla County, near the town of Mesita, production of scoria continued throughout the year. This porous lava material makes very fine building blocks and a ready market was found for all that was produced.

Custer County

The Defender and other mines in the Silver Cliff area made small shipments of lead-zinc-silver ores and lead ores. Several mines were doing exploration and probably could have gone into production if it had not been for the drop in lead and zinc prices. The Great Lakes Carbon Corporation purchased the Perlite Quarries of the Alexite Engineering Division of the Alexander Film Company at Rosita early in the year. Some exploratory diamond drilling was done in Custer County during the year and is rumored that some holes showed possibilities of thorium or other radio-active minerals.

Dolores County

The Rico Argentine Mining Company operated their Argentine, Mountain Springs, Silver Swan and other mines, milling all ores at their 150-ton flotation plant. Despite the decline in metal prices, crude ore produced was about equal in tonnage to that produced in 1952 and, in addition to maintaining production, the company carried on extensive exploration and development campaign which added materially to the underground ore reserves. The company constructed more housing units for employees and made other improvements that will be of future benefit. Some good uranium strikes were reported in Dolores County during the year and it was reported that some samples assayed as high as 2% uranium.

Douglas County

Douglas County produced silica rock and sand, clay and limestone northwest of Littleton, fire clay at the Hogback Mine, and plastic clays were mined in the Castle Rock area. Total dollar value of production was considerably higher than in 1952.

Eagle County

Total production from the Eagle Mine of the Empire Zinc Division of the New Jersey Zinc Company at Gilman was only about one-half as much as for 1952. This was caused partly by a strike which closed the mine and mill for over two months, and

the decline of lead and zinc prices. During the period of low metal prices, less zinc and lead milling ores are mined and more production is coming from the iron-gold-silver pyritic ores which are shipped directly to the smelter.

El Paso County

The Lennox Breed Quarry of the Golden Cycle Corporation operated all year, furnishing limestone for the plant at Pikeview. Other quarries and pits in El Paso County produced stone and clays with a total production slightly higher than in 1952.

Fremont County

Fremont County continued to be Colorado's most diversified non-metallic mineral producing county. Clays, limestones, marbles, gypsum, feldspar, mica and silica rock were mined. Crushed marble of various colors produced by Colonna and Company, Canon City, go all over the United States for use in terrazzo decorative flooring. The second oldest oil field in the United States is in Fremont County and prospecting which is now under way may develop additional sources of crude oil at depth. Some possibilities of radio-active materials have been discovered in various places in the county and it is possible that in the near future commercial deposits of thorium or uranium may be located.

Garfield County

Production of limestone from the Glenwood Springs Quarry, owned by Frank H. Norberg Company, was slightly less than in 1952. The Rifle Mine of the United States Vanadium Company worked all year and the uranium-vanadium processing plant at Rifle operated at full capacity all year. New processing equipment was put in, considerable new construction and improvements were made at the plant. The United States Bureau of Mines operated their Oil Shale Mine and Experimental Shale Oil Plant all year, and several large independent oil companies are said to be considering the possibilities of producing shale and experimenting with processes of their own.

Gilpin County

Small tonnages of gold, silver and gold-silver-lead-copper ores were produced during the year and while production was small, it was still considerably higher than the amounts produced in 1952. Near the end of the year a number of mines were being opened in the search for uranium. On the Queen Mineral Range were three properties which give evidence of containing pitchblende and one, the Cherokee Shaft, was being explored on the bottom level. The Calhoun Mine which found pitchblende in the Wood Vein on the 600-foot level closed down December 15th before all of their exploration work was completed. Finds of torbernite and secondary uraninite were reported at the Carroll, the Two Sisters and other mines at the west city limits of Central City. Most discoveries were made on old mine dumps but plans were made to re-open some of the properties to investigate the possibilities of

uranium ores underground. With this new uranium excitement, prospects for mining in Gilpin County are better than for many years.

Gunnison County

The Akron-Erie Mines of Callahan Zinc-Lead Company produced no ore during 1953 but for several months had a small crew doing exploration and development. However, all work was finally stopped and the mine completely closed in October. A company headed by Allyn Cole, a Glenwood Springs attorney, purchased the holdings of the Colorado Yule Marble Company at Marble and expect to produce limestone from the property and will build lime-burning kilns as soon as the weather will permit in the spring. The Micawber Mine of the Slate River Mining Company reported a strike of silver-lead-zinc-copper ore which they felt might develop into an ore body of consequence. The Lilly Belle Mining Company announced the discovery of tungsten at their Annebelle Mine. Development work was stopped at the Keystone Mine by the American Smelting and Refining Company at Crested Butte early in the summer and all work was devoted to the construction of the new 200-ton flotation mill. Most of the equipment for this mill came from the Mike Horse Mine in Montana. Production from the Keystone Mine will probably not start until the prices of lead and zinc become more favorable than at present. The Carter Mine and Mill of the Kanarado Mining and Development Company at Ohio City produced most of Gunnison County's gold, along with some silver and lead. The production of gold, silver, lead, zinc and copper in Gunnison County dropped from over \$800,000.00 in 1952 to \$8,350.00 in 1953. The Brown Derby Mine of the Poston Mining Company produced beryllium ores and lepidolite.

Hinsdale County

Only one load of ore was shipped from Hinsdale County in 1953, amounting to \$585.00. While the metal production for 1952 amounted to over \$327,000.00, the principal loss in production was caused by the closing of the Ute and Ulay Mine in Lake City. This property was purchased from the Colorado Standard Lead, Zinc Company in May by the Idarado Mining Company which had been operating the property on option.

Huerfano County

No mineral production reported for this year although the K. S. Mittry Construction Company, which has been doing exploratory work in the La Veta area, announced that some discoveries of uranium ores had been made.

Jackson County

The Ozark Mahoning Company operated their fluorspar mines and mill all year. Ore came from both open pit and underground mines and the 1953 production was almost double that of 1952. Several reported discoveries of pitchblende were made in Jackson county but there were no mining operations reported.

Jefferson County

Pitchblende and torbernite ores were produced and sold to the Atomic Energy Commission from Schwartzwalder Mine on Ralston Creek and plans were made for future development of the property. Several other properties in the same area reported uranium minerals but no other ores were shipped from the area. The old Malachite Mine west of Golden, shipped one truck load of copper-silver-gold ores. W. B. Kerkling produced much of the county's gold from his placer on Clear Creek, and other placer gold was produced as a by-product from the sand and gravel washing plants of the Brannan Sand and Gravel Company and the Rio Grande Sand and Gravel Company. Some beryllium was produced in various parts of the county and sold to the Beryllium Ores Company at Arvada. Only a very small amount of mica was produced during the year. Jefferson county was the State's largest producer of clay. Crushed stone from the quarries along Clear Creek had been a source of stone riprap for many earth-filled dams and canals, but litigation closed the quarries and there was no production of crushed stone in 1953 compared to production of more than one-half million dollars in 1952.

Lake County

A press announcement on May 27th stated the Resurrection Mining Company was out of ore; was going to curtail operations and probably would completely close down. On July 3rd, the Company stopped all work. This Company had been a large producer since 1942 and the closing of their mine left Leadville without a major producer of gold, silver, lead, zinc and copper. Soon after closing down, the Resurrection No. 2 shaft was leased to Robert L. Jones and in September, the Resurrection Company decided to do some limited exploration and to operate part of their mill for custom ore. The Company unwatered the Helena Mine in Iowa Gulch and started some exploration work. Newmont Mining Corporation, one of the owners of the Resurrection Mining Company, purchased the interest of the Hecla Mining Company and the United States Smelting, Refining & Mining Company and, in consequence, became sole owner of the Resurrection Mining Company. The American Smelting and Refining Company completed sinking the new Irene shaft to the Eclipse workings but after cutting the main station, shut the entire property down on account of the low metal prices. The Caldwell Mining Company operating the Hayden Mine, worked all year on development and shipped some ore to custom mills. The Arkansas Valley Smelter operated all year except for minor repair shutdowns, with tonnage smelted lower than 1952. Total production of gold, silver, lead, zinc and copper for 1953 was only about one-half of the amount produced in 1952.

La Plata County

The Vanadium Corporation of America exercised its option to purchase the Durango Plant from the Atomic Energy Commission and obtained permission to install a new roaster. It is re-

ported that after the roaster was installed, the Vanadium Corporation of America at the Durango Plant produced more uranium concentrates in a 30-day period than any other uranium-vanadium mill in the United States for a like period. Vanadium Corporation, in addition to producing uranium, is considered the largest single producer of vanadium in the world. The Bessie "G" Mine in the La Plata mountains, northwest of Durango, shipped some high grade ore to the Leadville Smelter.

Larimer County

Larimer county continues to be one of the larger producers of limestone and gypsum but had no reported metal production for 1953. The Copper King Mine in Cherokee Park developed some small amounts of pitchblende but stopped exploratory work at the mine and put it in condition to be used as a Tourist attraction.

Las Animas County

Clay was produced by the Trinidad Brick & Tile Company from their New Mary Mine and the only alabaster for the year came from Las Animas county. Several wildcat oil rigs were reported to be ready for exploratory drilling east of Trinidad.

Mesa County

The Atomic Energy Commission constructed a new repair and maintenance job and made other improvements at the Grand Junction headquarters. The number of men employed by the Atomic Energy Commission in 1953 materially increased over the number employed in 1952. Several important uranium finds were reported from diamond drilling exploration in the county.

Mineral County

The Emperius Mining Company operating many of the early day Creede mines, including the Amethyst, Commodore, Wedge, New York, Volunteer, Del Monte, Aspen and Equinox, was the principal producer in the county. Most of the ore mined was treated in the Company's 100-ton flotation plant but some high grade ores were shipped direct to the Leadville smelter. The Outlet Mining Company operating the Phoenix, also shipped ore to the Leadville smelter. Several other mines were reopened and explored and those which have high silver values probably can operate in spite of the low lead and zinc prices. While the Mineral county production, as a whole, was below the 1952 level, the decline was not nearly as severe as in some other sections of the State.

Montrose County

Montrose county was the most active county in Colorado in 1953 in uranium production. Two large processing plants in the county are that of the United States Vanadium Company at Urvan, and that of Vanadium Corporation of America at Naturita. Several large companies sank deep shafts on Atomic Energy Commission leases and there were purchases of large blocks of privately owned claims. The Golden Cycle Corporation completed a

new shaft 635 feet deep on Atkinson Mesa and were ready to go into production at the end of the year. The Shattuck-Denn Company is also sinking a deep vertical shaft in the same area. J. R. Sinplot sank an 800 foot incline shaft in the Bull Canyon area and the Consolidated Uranium Company was developing large groups in the same area. The Four Corner Uranium Corporation purchased large holdings from State Senator D. Lew Williams and Associates and began production from the property. At Uravan, the United States Vanadium Company put in a new milling process and doubled their plant capacity. At their Naturita Plant, the Vanadium Corporation of America added a new roaster and increased production by 80%.

Ouray County

The Colvin Mining and Milling Company operated the Silver Shield Mill for part of the year and shipped some lead, silver concentrates. The Camp Bird, King Lease, Inc., operated continuously throughout the year, with the metal production equal with that of 1952. The Idarado Mining Company had a disastrous fire on June 7th which destroyed all surface buildings at the portal of the Treasury Tunnel. The fire caused a shutdown of the Idarado Mill for about three weeks. New buildings to replace the ones destroyed by fire, are modern fire-proof structures.

Park County

The Phillips Mine of the Buckskin Joe Mines Limited, continued to be the only steady producer of metals in Park County. The Ling Mine of the Cordillera Corporation produced a small tonnage of high grade gold ore and the Alma Syndicate shipped small amounts of gold and silver ores. A small amount of gold was taken from placers near Alma. The Notamas Company of California purchased all the assets of the South Park Dredging Company at Fairplay. The large dredge of the South Park Company has not been operated since the end of 1951.

Pitkin County

A number of percussion and diamond drill holes were completed in some of the Aspen mines under the direction of the Atomic Energy Commission. The mines which were explored are under lease to the Herron Bros., of Aspen and no definite reports were released on the results of the exploratory drilling. Small amounts of silver ore were produced from the Nelson and Wichita Egg Mine.

Pueblo County

The only mineral production in Pueblo was from clay but the Mica Grinding Plant of the International Mineral and Chemical Corporation processed mica that was produced in other counties and was in operation all year.

Rio Blanco County

Rio Blanco county at Rangely, is Colorado's largest oil producing area, accounting for about one-half of all oil produced in the State. Several companies were exploring for uranium in the

county and new discoveries were reported, in addition to those already known. Several small mines near Meeker shipped some uranium ores during the year.

Rio Grande County

The Newmont Mining Corporation took a long term lease of some 2,000 acres of mining property owned by George Garry and B. T. Poxton at Summitville. During the summer months, Newmont diamond drilled on the Summitville mines property and did other geological and exploratory work. John Livermore, Geologist of the Newmont Exploration Department, was in charge of the work. It is expected more work will be done as soon as the weather will permit, this coming spring or summer.

Routt County

The Midwest Uranium Corporation of Salt Lake City leased a number of claims about four miles from Steamboat Springs. These claims were located by the Hoskinson Brothers and are said to contain a very good showing of uranium.

Saguache County

William J. Costello leased the Rawley Mine at Bonanza and continued to ship smelting ores which contained lead, silver, gold and copper to the smelter at Leadville. La Garita Mines, Inc., operated the Crystal Hill and Esperanza Mines and milled the ore at their own mill nearby. Concentrates containing gold and silver were shipped to Leadville and gold retorts to the Mint in Denver. Bear Creek Mining Company, Exploration Subsidiary of Kennicott Copper Corporation, did considerable exploratory diamond drilling in the Bonanza area. The Wannamaker Mining and Milling Company carried on development work at their Sky City Mine in the Big Park District and reported finds of copper-silver-lead ore. The Saguache Smelting Company completed buildings for a new smelter which is being constructed near the town of Saguache. The only reported production of turquoise for the year came from the Villa Grove Turquoise Lode near Villa Grove.

San Juan County

The Shenandoah-Dives Company ceased operation March 14, 1953, and closed down their 700-ton mill. This company was the largest metal producer in San Juan county and the shutdown reduced the county's production to the lowest level since 1922. In July, the company received a \$210,900 grant from the Defense Minerals Exploration Administration for exploration of the Letter "G" vein and for the balance of the year continued only on this exploration. The Pride of the West was a substantial producer in 1953, shipping to the Shenandoah-Dives Mill until the shutdown, and after that time sending their ore to the West Mill at Howardsville owned by Falk Metals Corporation. The United States Metals Company continued development work on the Henrietta Group and shipped some ore, and the company also continued exploratory and development work at several other properties owned by them. The Lead Carbonate Mine shipped some ore during the year to

custom mills and later decided to stockpile their production. Other producing mines were: Bonita, Columbus, Great Eastern, Green Mountain and others. The Dawn of Day Mine in Dry Creek produced tungsten during the year.

San Miguel County

Boyd Robinson shipped iron oxide (bog-iron) from his property at Ophir. This ore is considered an excellent base for paint making. The Consolidated Uranium Mines, Inc., started exploratory and development work on their holdings in the Mineral Mountain and Bold Canyon areas. Idarado Mining Company was the principal producer during 1953 with ores coming from the Ajax, Black Bear and other properties. While the company's mill at the portal of Treasury Tunnel is in Ouray county, all ores came from San Miguel county. In May 1953, the Idarado Mining Company purchased the Telluride Mine, which operated the Smuggler Union, Montana and Tom-Boy Mines. The Silver Bell Mines Company operated their 175-ton flotation mill at Ophir, producing lead-silver-gold-copper concentrate and some tungsten. Most of the ore came from the Carbonero Mine at old Ophir although ores containing tungsten came from the Silver Bell Mine.

Summit County

W. L. Davenport, operating the Wellington Mine at Breckenridge, was the largest producer in the county and the tonnage produced was double that of 1952. After the Resurrection Mining Company closed their custom mill at Leadville, Davenport shipped his ore to the United States Smelting and Refining Company at Midvale, Utah. The Monte Cristo Mine worked by Gerald Galloway, shipped some silver-lead-zinc-gold ore. The Juniata Mining and Milling Company shipped small amounts of manganese from their Ceciel and Betty Jean Mines. Elvin Oelrich worked the Sts. John Mine at Montezuma all year on a small scale. Other producers were the Chatauqua, Ida Belle, Silver King, Pennsylvania and others. Some lead, silver and gold concentrates were shipped from the Queen of the West Mill at Kokomo. The Big Four near Green Mountain Dam was leased to Kyle and Thomas and they were preparing the mine for production. Tungsten was reported near Blue Lakes and the Silicate Reduction Company was expected to build a mill to handle tungsten ores.

Teller County

Gold production in Teller county increased from 48,257 ounces in 1952 to 50,500 ounces in 1953. The Carlton Mill operated all year with an average mill tonnage of about 16,000 tons per month. 70% of the ore milled came from dumps with mine ore coming from the company's Ajax and Cresson Mines. The Ajax continued to be the largest gold mine in the State and some high grade ore from the 3100-foot level was as high as \$5.50 per pound in gold. The Ajax also made a discovery of ore on the Black Diamond vein in an area previously considered to be out of the general ore zone. The Free Coinage, Dr. Jack Pot, El Paso, Gold King and Tenderfoot were substantial producers. The Globe Hill Mining Company,

operating the Chicago Tunnel, shipped considerable ore during the year and also became active in the hunt for uranium in the Colorado Plateau area. The Front Range Mines Company deepened their main winze to a point 687 feet below the bottom of the Strong Shaft. The Front Range Company leased the Mary Cashen Mine to the Golden Cycle so that it could be worked through the Ajax Mine. The La Clair Mining Company put a new steel head-frame and hoisting equipment on the Grace Greenwood Mine in preparation to reopening. Blevins Davis, with John W. Star, formed the Gold Sovereign Leasing Company and started work on the Gold Sovereign Mine. The same interests have taken leases on Dante, Trilby, Trail, Wildhorse and Ramona.

PRODUCTION BY COUNTIES

1953

Adams County

Area, 1,247 Square Miles

Gold	\$ 42,630.00
Silver	158.00
TOTAL.....	\$ 42,788.00

Boulder County

Area, 753 Square Miles

Gold	\$ 4,585.00
Silver	22,022.00
Copper	4,592.00
Lead	26,200.00

TOTAL.....	\$ 57,399.00
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Clay	\$ 2,483.00
Fluorspar	1,394,580.00
Peat	23,100.00
Building Stone	386,807.00
Crushed Stone	14,447.00
Tungsten	1,139,555.00

TOTAL.....	\$ 2,960,972.00
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Total Production for County.....	\$ 3,018,371.00
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Chaffee County

Area, 1,039 Square Miles

Gold	\$ 9,940.00
Silver	601.00
Copper	574.00

Lead	2,882.00
Zinc	3,680.00

TOTAL.....	\$ 17,677.00
Calcium Phosphate	\$ 1,709.00
Feldspar	302,370.00
Fluorspar	269,290.00
Crushed Stone	1,873.00
Limestone	620,431.00
Monumental Stone	5,800.00

TOTAL.....	\$ 1,201,473.00
Total Production for County.....	\$ 1,219,150.00

Clear Creek County

Area, 394 Square Miles

Gold	\$ 80,710.00
Silver	46,930.00
Copper	13,776.00
Lead	115,280.00
Zinc	21,390.00

TOTAL.....	\$ 278,086.00
Beryl	\$ 1,875.00
Feldspar	700.00

TOTAL.....	\$ 2,575.00
Total Production for County.....	\$ 280,661.00

Costilla County

Area, 1,215 Square Miles

Volcanic Cinder	\$ 74,700.00
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Custer County

Area, 737 Square Miles

Gold	\$ 105.00
Silver	305.00
Lead	2,620.00
Zinc	1,380.00

TOTAL.....	\$ 4,410.00
Monumental Stone	\$ 12,000.00
Perlite	52,792.00

TOTAL.....	\$ 64,792.00
Total Production for County.....	\$ 69,202.00

Dolores County

Area, 1,028 Square Miles

Gold	\$ 3,325.00
Silver	94,042.00

Copper	10,332.00
Lead	490,202.00
Zinc	605,820.00

TOTAL.....\$ 1,203,721.00

Douglas County

Area, 843 Square Miles

Clay	\$ 150,536.00
Limestone	488.00
Silica Rock	977.00

TOTAL.....\$ 152,001.00

Eagle County

Area, 1,685 Square Miles

Gold	\$ 131,250.00
Silver	525,925.00
Copper	252,560.00
Lead	655,000.00
Zinc	3,875,500.00

TOTAL.....\$ 5,440,235.00

Volcanic Cinder

.....\$ 800.00

Total Production for County.....\$ 5,441,035.00

El Paso County

Area, 2,158 Square Miles

Clay	\$ 27,652.00
Crushed Stone	12,000.00
Limestone	120,000.00

TOTAL.....\$ 159,652.00

Fremont County

Area, 1,562 Square Miles

Beryl	\$ 4,135.00
Clay	32,484.00
Dolomite	127,344.00
Feldspar	9,137.00
Gypsum	235,714.00
Limestone	1,491,313.00
Mica	9,366.00
Monumental Stone	2,222.00
Silica Rock	45,532.00
Terrazzo Chips (Marble).....	21,837.00
Travertine (Building Stone).....	13,748.00

TOTAL.....\$ 1,992,832.00

Garfield County

Area, 2,994 Square Miles

Limestone\$ 30,565.00

Gilpin County

Area, 149 Square Miles

Gold\$ 5,530.00

Silver 882.00

Copper 574.00

Lead 524.00

TOTAL.....\$ 7,510.00

Peat Moss\$ 1,050.00

Total Production for County.....\$ 8,560.00

Gunnison County

Area, 3,242 Square Miles

Gold\$ 4,340.00

Silver 800.00

Lead 2,620.00

TOTAL.....\$ 7,760.00

Beryllium\$ 21,000.00

Lepidolite 27,000.00

TOTAL.....\$ 48,000.00

Total Production for County.....\$ 55,760.00

Hinsdale County

Area, 1,057 Square Miles

Gold\$ 35.00

Silver 58.00

Lead 262.00

Zinc 230.00

TOTAL.....\$ 585.00

Jackson County

Area, 1,623 Square Miles

Fluorspar\$ 1,126,276.00

Jefferson County

Area, 786 Square Miles

Gold\$ 11,165.00

Silver 119.00

Copper 1,722.00

TOTAL.....\$ 13,006.00

Beryl\$ 1,821.00

Clay 401,088.00

Feldspar	28,857.00
Mica	97.00

TOTAL.....	\$ 431,863.00
Total Production for County.....	\$ 444,869.00

Lake County

Area, 380 Square Miles

Gold	\$ 327,075.00
Silver	177,628.00
Copper	33,866.00
Lead	804,864.00
Tin	14,707.00
Zinc	907,350.00

TOTAL.....	\$ 2,265,490.00
Manganese	\$ 1,350.00
Molybdenum	37,306,341.00
Monazite	3,307.00
Peat Moss	3,750.00
Silica Rock	28,000.00
Tungsten	1,651,986.00

TOTAL.....	\$38,994,734.00
Total Production for County.....	\$41,260,224.00

La Plata County

Area, 1,689 Square Miles

Gold	\$ 7,070.00
Silver	148.00

TOTAL.....	\$ 7,218.00
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Larimer County

Area, 2,619 Square Miles

Gypsum	\$ 130,742.00
Limestone	808,811.00
Sandstone (Building Stone).....	48,810.00

TOTAL.....	\$ 988,363.00
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Las Animas County

Area, 4,794 Square Miles

Alabaster (Estimate)	\$ 7,000.00
Clay	31,250.00

TOTAL.....	\$ 38,250.00
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Mineral County

Area, 921 Square Miles

Gold	\$ 43,995.00
Silver	157,448.00

Copper	6,888.00
Lead	444,352.00
Zinc	197,340.00
TOTAL	\$ 850,023.00

Ouray County

Area, 540 Square Miles

Gold	\$ 112,840.00
Silver	83,242.00
Copper	145,796.00
Lead	356,320.00
Zinc	198,720.00
TOTAL	\$ 896,918.00
Tungsten	\$ 830.00
Total Production for County	\$ 897,748.00

Park County

Area, 2,166 Square Miles

Gold	\$ 51,450.00
Silver	6,932.00
Copper	7,462.00
Lead	8,646.00
Zinc	63,250.00
TOTAL	\$ 137,740.00

Pitkin County

Area, 974 Square Miles

Gold	\$ 35.00
Silver	3,975.00
Lead	2,358.00
Zinc	460.00
TOTAL	\$ 6,828.00

Pueblo County

Area, 2,401 Square Miles

Clay	\$ 244,888.00
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Saguache County

Area, 3,144 Square Miles

Gold	\$ 4,760.00
Silver	4,223.00
Copper	3,444.00
Lead	9,432.00
TOTAL	\$ 21,859.00
Turquoise (Estimate)	\$ 4,500.00
Total Production for County	\$ 26,359.00

San Juan County

Area, 392 Square Miles

Gold	\$ 94,150.00
Silver	107,050.00
Copper	77,490.00
Lead	374,660.00
Zinc	133,860.00
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TOTAL	\$ 787,210.00
Tungsten	\$ 12,000.00
Total Production for County	\$ 799,210.00

San Miguel County

Area, 1,283 Square Miles

Gold	\$ 1,414,560.00
Silver	702,759.00
Copper	1,119,300.00
Lead	2,076,088.00
Zinc	2,399,590.00
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TOTAL	\$ 7,712,297.00
Tungsten	\$ 6,693.00
Total Production for County	\$ 7,718,990.00

Summit County

Area, 615 Square Miles

Gold	\$ 18,305.00
Silver	43,285.00
Copper	9,184.00
Lead	314,400.00
Zinc	276,000.00
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TOTAL	\$ 661,174.00
Manganese	\$ 3,500.00
Total Production for County	\$ 664,674.00

Teller County

Area, 554 Square Miles

Gold	\$ 1,804,565.00
Silver	9,082.00
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TOTAL	\$ 1,813,647.00
Feldspar	\$ 9,800.00
Monumental Stone	22,680.00
Peat	3,171.00
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TOTAL	\$ 35,651.00
Total Production for County	\$ 1,849,298.00

PRODUCTION IN 1953

Production figures given are as accurate as we believe possible to get under existing conditions. No actual or accurate production of uranium produced within the State can be given as such information is restricted and not released by the Atomic Energy Commission.

Production in value of gold, silver, lead, zinc and copper were provided by the Mineral Industry Division of the United States Bureau of Mines, Region IV, and crude oil production figures were provided by the Colorado Oil and Gas Conservation Commission. All other production figures are from the records of the Colorado Bureau of Mines and have been obtained from the mining operators of the State.

In spite of the very serious drop in the production of lead and zinc, the mineral production of the State continued to increase. The accelerated mining program at the Climax Mine alone made up for more than two-thirds of the production loss caused by the drop of lead and zinc mining.

The increase in the production of tungsten and other metals, plus the general increase of the non-metallic minerals produced took up most of the loss suffered by the decline as noted above.

The oil industry continued its upward surge and the increase in petroleum products in 1953 amounted to more than \$17,000,000. Approximately 750 wells were drilled in 1953, with 366 of them being wildcats. One new major oil pool was discovered in the Denver-Julesburg Basin and a new gas field in southeastern Colorado. Of the 366 wildcats drilled, 28 discovered oil, 13 gas and the balance were dry holes. The percentage of successful wildcat holes was 11.2 of the total drilled. At the end of the year it was reported that Colorado had a total of 1,225 producing wells in 76 different oil fields. Rangely, Rio Blanco County, in northwestern Colorado, continues to be the most productive oil field in the State.

The following table shows the steady increase of all mineral production for the past four years.

Year	Metals	Non-Metallics	Oil & Gas	Total
1950	\$ 43,619,318	\$ 3,930,578	\$58,382,500	\$105,932,396
1951	63,312,690	4,823,869	70,453,050	138,589,609
1952	117,039,055	12,681,789	80,563,705	210,284,549
1953	138,765,509	14,027,866	97,287,265	250,080,640

METAL PRODUCTION

1953

Uranium (Mining and processing with Vanadium by-products—Value to State).....	\$ 75,000,000.00
Molybdenum	37,306,341.00
Zinc	8,684,570.00
Lead	5,686,710.00

Gold	4,172,420.00
Tungsten	2,811,064.00
Silver	1,987,614.00
Copper	1,687,560.00
Miscellaneous (Metals which cannot be separated for Production Value).....	1,103,750.00
Pyrite	207,148.00
Beryllium	98,775.00
Tin	14,707.00
Manganese	4,850.00
TOTAL	\$138,765,509.00

NON-METALLIC PRODUCTION

1953

Alabaster	\$ 7,000.00
Calcium Phosphate	1,709.00
Cement	5,198,703.00
Clays	890,381.00
Dolomite	127,344.00
Feldspar	663,901.00
Fluorspar	2,790,146.00
Gypsum	366,456.00
Lepidolite	27,000.00
Limestone	3,071,608.00
Marble	21,837.00
Mica	99,715.00
Monazite	3,307.00
Peat	31,071.00
Perlite	52,792.00
Silica Rock	74,509.00
Stone, Building	449,365.00
Stone, Crushed	28,320.00
Stone, Monumental	42,702.00
Turquoise	4,500.00
Volcanic Cinders	75,500.00
TOTAL	\$ 14,027,866.00

OIL AND GAS PRODUCTION

1953

Crude Oil	\$ 91,697,265.00
Gas, all classes (well-head value).....	5,590,000.00
TOTAL	\$ 97,287,265.00
Metals	\$138,765,509.00
Oil and Gas	97,287,265.00
Non-Metallies	14,027,866.00
TOTAL MINERAL PRODUCTION	\$250,080,640.00

ACCIDENTS

There were eight mining fatalities in 1953 which establishes a record of safety for the past fifteen years, as the average rate of metal mine fatalities for the fifteen year period, 1939-1953, has been sixteen per year. Oil well fatalities for the year were four and there was one fatality chargeable to construction.

As the records of oil and construction fatalities were not always considered under the jurisdiction of the Bureau of Mines, there is no basis of comparison between the fifteen year period and the year 1953. However, other records indicate that oil well fatalities have been about the same and the previous fatality rate in the construction industry considerably higher.

Of the eight metal mining fatalities, four were caused by falling rock, three were caused by falls into open holes and one caused by a premature blast.

Three of the four oil well fatalities were caused by falling objects and one was caused by an entanglement in a hoisting line.

The one construction accident was caused by falling bricks while tearing down part of an old building.

Both the frequency and severity rates were lowered during the year and indicate better mine inspection, plus more interest in the safety by management and by men employed in the mineral industries. Frequency rate of accidents decreased in all mineral industries except underground metal mines and quarries during the year and the severity rate decreased by a considerable amount in all operations except rock quarries. Both the frequency and severity rates based upon those of the past years show a remarkable drop and it is the hope of the Bureau of Mines that these rates can continue to decrease.

The number of man-hours worked in all mineral industries was about the same as 1952, yet the average total frequency rate for 1953 was only 42 and the severity rate 4.27, this compares with 54 and 6.61 for 1952.

SUMMARY OF ACCIDENTS—1953

	Total man hours	Lost time injuries	Number of days lost	Frequency rate per one million man hours	Severity rate per one million man hours
Mines, Surface	3,491,056	56	655	16	.19
Mines, Underground	6,607,264	655	65,942	99	9.98
Quarries	881,408	27	314	31	.36
Mills, Smelters, Plants, etc.	8,736,960	142	8,646	16	.99
State and Federal Projects	887,936	22	274	25	.31
Oil Wells	3,550,000	185	27,320	52	7.70
Total	24,154,624	1,087	103,151	45	4.27

This table includes the loss of 78,000 days due to 13 fatalities and 12,425 days due to 31 permanent partial disabilities.

Frequency rate= $\frac{\text{No. of injuries} \times 1,000,000}{\text{No. of man-hours of exposure}}$ Severity rate= $\frac{\text{Total time charges in days} \times 1,000}{\text{No. of man-hours of exposure}}$

FATAL ACCIDENTS—1953

Metal Mining

Date	Name of Person	Employed By	Cause of Death
3-23-53	Herbert Dale, Jr.	Telluride Mines, Inc.	Fell down ore pass
4-17-53	William M. Lewis	Cresson Consolidated Gold Mining Company	Crushed by falling rock.
4-26-53	George M. Thomas	Ozark-Mahoning Company	Crushed by falling rock.
7-17-53	Leo Whittaker	Idarado Mining Company	Crushed by falling rock.
7-30-53	J. R. Medina	Idarado Mining Company	Fell down raise
9-16-53	William N. Bersonnet, III	William N. Bersonnet, Jr. (Father)	Fell from ladder into shaft
11-15-53	Ben Padilla	Telluride Mines, Inc.	Premature blast
12-11-53	Thomas O. Porter	Mile High Mining Company	Crushed by falling rock
Oil Wells			
2-16-53	LeRoy Helms	Mountain States Drilling Company	Crushed by falling elevator guard
9-8-53	Amos A. Carson	Twin T. Drilling Company	Crushed by falling drill pipe
12-16-53	Harold F. Belroy	Arapahoe Drilling Company	Crushed by fall of pull-back weight
12-16-53	Robert G. Patrick	S. D. Johnson Drilling Company	Caught in hoisting line
Construction			
6-28-53	C. C. Abbott	Rocky Mountain Oil & Paving Company	Crushed by falling bricks

AGENCY CAUSING ACCIDENT

		Temporary Injuries Loss of one day or more
Mines, Surface		
Cable - Hose - Ropes		1
Cars - Motors - Vehicles		5
Chemicals		1
Drills - Drilling Equipment		17
Dust and Particles		1
Falls		10
Falling or Flying Objects		5
Flames - Fire - Hot Substances		3
Hoists - Hoisting Apparatus		1
Machinery		2
Materials		3
Metal Objects		3
Timber - Lumber - Poles		4
Total		56
Quarries		
Bars - Bins - Chutes		2
Cars - Motors - Vehicles		4
Dust and Particles		2
Falls		4
Falling or Flying Objects		7
Flames - Fire - Hot Substances		1
Machinery		2
Materials		3
Rock - Ore - Ground		2
Total		27

AGENCY CAUSING ACCIDENT

		Temporary Injuries Loss of one day or more
Mines, Underground		
Bars - Bins - Chutes	Fatals	12
Cables - Hose - Ropes		9
Cars - Motors - Vehicles		108
Chains - Gears -Sprockets		2
Belts - Conveyors - Pulleys		1
Containers		3
Chemicals		10
Doors - Windows - Gates.....		2
Drills - Drilling Equipment		45
Dust and Particles		33
Explosives - Loading, Firing		1
Electricity - Elec. Equipment		2
Falls	4	64
Falling or Flying Objects	3	168

Mines, Underground—Continued	Fatals	Temporary Injuries	
		Loss of one day or more	
Flames - Fire-Hot Substances		9	
Hoists - Hoisting Apparatus		19	
Ladders - Manways		2	
Machinery		43	
Materials		20	
Metal Objects		38	
Platforms - Staging - Scaffolds		1	
Premature or delayed blasts	1	11	
Rock - Ore - Ground		18	
Shovels, power		1	
Timber - Lumber - Poles		22	
Unclassified - Insufficient Data		3	
Total.....	8	647	655

AGENCY CAUSING ACCIDENT

Mills, Smelters, Plants, etc.	Fatals	Temporary Injuries	
		Loss of one day or more	
Bars - Bins - Chutes		1	
Cables - Hose - Ropes		1	
Cars - Motors - Vehicles		6	
Chains - Gears - Sprockets		1	
Belts - Conveyors - Pulleys		5	
Containers		11	
Chemicals		13	
Doors - Windows - Gates		3	
Drills - Drilling Equipment		2	
Dust and Particles		2	
Electricity - Elec. Equipment		1	
Falls		27	
Falling or Flying Objects	1	13	
Flames - Fire - Hot Substances		7	
Hoists - Hoisting Apparatus		2	
Ladders - Manways		5	
Machinery		15	
Materials		15	
Metal Objects		3	
Platforms - Staging - Scaffolds		2	
Rock - Ore - Ground		3	
Screens		2	
Timber - Lumber - Poles		1	
Total.....	1	141	142

AGENCY CAUSING ACCIDENT

State and Federal Projects	Temporary Injuries	
	Loss of one day or more	
Bars - Bins - Chutes	1	
Cables - Hose - Ropes	1	
Cars - Motors - Vehicles	1	
Containers	1	
Dust and Particles	2	
Falls	4	
Falling or Flying Objects	3	
Machinery	3	
Materials	4	
Metal Objects	2	
Total	22	

AGENCY CAUSING ACCIDENT

Oil Wells	Fatalis	Temporary Injuries	
		Loss of one day or more	
Cables - Hose - Ropes		4	
Cars - Motors - Vehicles		2	
Chains - Gears - Sprockets		10	
Belts - Conveyors - Pulleys		2	
Containers		2	
Chemicals		2	
Derricks - Headframes	1	21	
Drills - Drilling Equipment		43	
Dust and Particles		5	
Electricity - Elec. Equipment		1	
Falls		14	
Falling or Flying Objects	2	29	
Flames - Fire - Hot Substances		10	
Machinery	1	18	
Materials		12	
Metal Objects		4	
Timber - Lumber - Poles		2	
Totals	4	181	185

MINES, SURFACE

Type of Injury	Temporary Injuries	
	Loss of one day or more	
Burns	3	
Caught in or between	10	
Fall on the same level	8	
Fall on different level	2	

Type of Injury—Continued

Handling	9
Striking against - Struck by	22
Slip - Stepping on	2
Total	56

Nature of Injury

Foreign Bodies	3
Cuts - Bruises - Lacerations - Punctures.....	25
Strains - Sprains - Dislocation	11
Hernia	4
Fractures	9
Burns - Scalds	3
Occupational Disease	1
Total	56

Site of Injury

Eye	2
Head - Face - Neck	2
Trunk	14
Upper Extremities	17
Lower Extremities	19
General	2
Total	56

MINES, UNDERGROUND

Type of Injury	Fatals	Temporary Injuries	
		Loss of one day or more	
Burns		12	
Caught in or between.....		101	
Fall on the same Level		42	
Fall on different Level	3	25	
Handling		92	
Inhalation - Suffocation		10	
Striking against - Struck by	5	329	
Slip - Stepping on		36	
Totals	8	647	655

Nature of Injury

Foreign Bodies		44
Cuts - Bruises - Laceration - Punctures	1	338
Strains - Sprains - Dislocation		122

Nature of Injury—Continued

Hernia		14	
Fractures	7	83	
Amputation		21	
Burns - Scalds		12	
Occupational Disease		11	
Nature Unknown		2	
	<hr/>	<hr/>	<hr/>
Totals	8	647	655

Site of Injury

Eye		53	
Head - Face - Neck	2	41	
Trunk		183	
Upper Extremities		153	
Lower Extremities		187	
General	6	30	
	<hr/>	<hr/>	<hr/>
Totals	8	647	655

QUARRIES

Type of Injury	Temporary Injuries Loss of one day or more
Burns	1
Caught in or between	2
Fall on the same Level	3
Fall on different Level	1
Handling	6
Striking against - Struck by	13
Slip - Stepping on	1
	<hr/>
Total	27

Nature of Injury

Foreign Bodies	3
Cuts - Bruises - Laceration - Punctures.....	8
Strains - Sprains - Dislocation	7
Fractures	8
Burns - Scalds	1
	<hr/>
Total	27

Site of Injury

Eye	2
Head - Face - Neck	2
Trunk	9
Upper Extremities	6
Lower Extremities	8
	<hr/>
Total	27

MILLS AND SMELTERS

Type of Injury	Fatales	Temporary Injuries	
		Loss of one day or more	
Burns		18	
Caught in or between		17	
Fall on same Level		25	
Fall on different Level		2	
Handling		28	
Inhalation - Suffocation		1	
Striking against - Struck by	1	38	
Slip - Stepping on		12	
	<hr/>	<hr/>	<hr/>
Totals	1	141	142
Nature of Injury			
Foreign Bodies		4	
Cuts - Bruises - Laceration - Punctures		41	
Strains - Sprains - Dislocation		50	
Hernia		6	
Fractures	1	19	
Amputation		2	
Burns - Scalds		18	
Occupational Disease		1	
	<hr/>	<hr/>	<hr/>
Totals	1	141	142
Site of Injury			
Eye		10	
Head - Face - Neck		11	
Trunk		58	
Upper Extremities		23	
Lower Extremities		36	
General	1	3	
	<hr/>	<hr/>	<hr/>
Totals	1	141	142

STATE AND FEDERAL PROJECTS

Type of Injury	Temporary Injuries	
	Loss of one day or more	
Caught in or between	2	
Fall on the same Level	2	
Handling	4	
Striking against - Struck by	11	
Slip - Stepping on	3	
	<hr/>	<hr/>
Total	22	
Nature of Injury		
Foreign Bodies	2	
Cuts - Bruises - Laceration - Punctures	9	

Nature of Injury—Continued

Strains - Sprains - Dislocation	8
Fractures	3
Total	22

Site of Injury

Eye	3
Head - Face - Neck	1
Trunk	8
Upper Extremities	2
Lower Extremities	8
Total	22

OIL WELLS

Type of Injury	Fatalis	Temporary Injuries	
		Loss of one day or more	
Burns		12	
Caught in or between		42	
Fall on the same Level		17	
Handling		15	
Inhalation - Suffocation		1	
Striking against - Struck by	4	92	
Slip - Stepping on		2	
Totals	4	181	185

Nature of Injury

Foreign Bodies		9	
Cuts - Bruises - Laceration - Punctures		78	
Strains - Sprains - Dislocation		27	
Fractures	4	49	
Amputation		7	
Burns - Scalds		11	
Totals	4	181	185

Site of Injury

Eye		11	
Head - Face - Neck	3	21	
Trunk		29	
Upper Extremities		64	
Lower Extremities		55	
General	1	1	
Totals	4	181	185

MEN EMPLOYED—1953

Total number of men employed in the mineral industries which are inspected by the Colorado Bureau of Mines is the largest since the year 1938.

Due to greater mechanization in some of the larger metal mines and due to the completion of several large surface and milling plants and, further, due to the uncertainty of the precious and base metal prices and other handicaps, the total number of men employed in the mineral industry probably will begin to decline within the coming year.

	Mines		Mills Smelters		Quarries Clay Mines		Placers		Proj- ects	Oil Wells
	No.	Men	No.	Men	No.	Men	No.	Men	Men	Men
District 1	107	468	22	313	37	217	9	20	199	1200
District 2	33	278	6	90	54	223	1	2	167	100
District 3	56	2476	16	1116	12	73	3	6	107	650
District 4	215	1905	18	2178	..	..	..	..	279	175
TOTAL ...	411	5127	62	3697	103	513	13	28	752	2125

TOTAL MEN EMPLOYED

District No. One.....	2,417
District No. Two	860
District No. Three	4,428
District No. Four.....	4,537
TOTAL	12,242

INSPECTIONS

During the year 1953 the district mine inspectors made 850 full inspections with written reports. In addition to this, there were 250 partial written reports which required a return to some property previously inspected to determine whether or not safety recommendations that had been made were carried out and completed.

This is an increase of approximately 65 inspections over the year before and really establishes an unusual record when it is considered that some of the mines inspected by the inspectors require from three to five days to completely go over the property and that other small mines are so widely scattered that frequently an inspector has to drive as much as one hundred miles to make an inspection of what is considered an adjoining property.

For the work days during the year each inspector averages approximately one complete written inspection per day.

In addition to inspections, the mine inspectors gave short talks on accident prevention and mine safety in various sections of the state and also taught several mine first aid classes.

1953 INSPECTIONS

MADE BY MINE INSPECTORS, DISTRICTS Nos. 1, 2, 3, 4

	District 1	District 2	District 3	District 4	Total
1953	Chapman	Theobald	Doyle	Franz	
January	15	15	2	38	70
February	11	5	14	24	54
March	25	15	19	21	80
April	28	10	22	33	93
May	29	4	18	46	97
June	31	5	22	25	83
July	18	7	16	20	61
August	33	12	15	21	81
September	11	8	29	27	75
October	21	7	13	26	67
November	14	7	7	22	50
December	18	2	10	9	39
	<hr/> 254	<hr/> 97	<hr/> 187	<hr/> 312	<hr/> 850

INSPECTIONS IN 1953

	Mines	Quarries Clay Mines	Mills Smelters	Placers	Projects	Oil Wells	Total
District 1.....	117	33	21	10	4	69	254
District 2.....	24	50	5	3	4	11	97
District 3.....	80	18	36	6	16	31	187
District 4.....	264	....	28	....	9	11	312
	<hr/> 485	<hr/> 101	<hr/> 90	<hr/> 19	<hr/> 33	<hr/> 122	<hr/> 850

LIST OF OPERATING MINES IN VARIOUS COUNTIES IN COLORADO—1953 OPERATING MINES IN BOULDER COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
After Thought	Jamestown	Williamson & Son	728 U. S. Nat'l. Bank Bldg., Denver	Fluorspar
Argo	Jamestown	Williamson & Son	728 U. S. Nat'l. Bank Bldg., Denver	Fluorspar
Blue Jay	Jamestown	Williamson & Son	728 U. S. Nat'l. Bank Bldg., Denver	Fluorspar
Boulder County Tunnel	Cardinal	H. W. Low	244 Lakeside Drive, Oakland, California	Fluorspar
Bonanza No. 2 & No. 6	Nederland	Bodner Bros.	500 Grand Avenue, Louisville	Exploration
Burlington (m)	Jamestown	Allied Chemical & Dye Co.	Box 228, Boulder	Tungsten
Caribou	Caribou	Nederland Mines, Inc.	1406 Pearl St., Boulder	Fluorspar
Cold Springs	Nederland	Cold Spring Tungsten, Inc.	405 Interstate Trust Bldg., Denver	Silver, Lead, Uranium
Comstock	Caribou	Pandora Metals, Inc.	1555 Dayton St., Aurora	Tungsten
Comstock	Ward	Gold Range, Inc.	Ward	Development
Conger	Nederland	Smith & Rugg	Nederland	Exploration
Copeland	Boulder Canyon	O. P. Pherson	1743 Mapleton Street, Boulder	Tungsten
Cross (m)	Nederland	Thomas Linder	Nederland	Tungsten
Emmett	Jamestown	Williamson & Son	728 U. S. Nat'l. Bank Bldg., Denver	Tungsten
Eureka	Boulder Canyon	Eureka Tungsten	3255 So. Cherokee St., Englewood	Fluorspar
Forest Home	Nederland	Erickson & Pastore	1946 Walnut Street, Boulder	Tungsten
Fraction	Sugarloaf	Fraction Mining Co.	319 Platte Street, Longmont	Tungsten
Gold Coin & Princess Group	Sugarloaf	Boulder Tungsten Mines, Inc.	Box 441, Boulder	Tungsten
Good Friday-April Fool	Sugarloaf	Jump Mining	916-14th Street, Boulder	Tungsten
Hallie A	Nederland	James L. McBroom & L. R. Allen	Box 372A-RR, 2 Boulder	Exploration
Hillside	Sugarloaf	Stoehy & Overly	Rt. 2, Box 444, Boulder	Tungsten
Hoosier	Nederland	Geo. Prime & Johnson Bros.	Nederland	Tungsten
Idaho Tunnel	Caribou	Nederland Mines, Inc.	106 Pearl Street, Boulder	Silver, Lead, Uranium
Katie & Dorothy Group (m)	Sugarloaf	Boulder Tungsten Mines, Inc.	Box 441, Boulder	Tungsten
Lone Pine	N.W. Nederland	Vanadium Corp. of America	420 Lexington Ave., New York 17, N. Y.	Tungsten
Lucky Lady	Sugarloaf	Al Rogers	Box 150, Boulder	Tungsten
Nation Treasure	Jamestown	Williamson & Son	728 U. S. Nat'l. Bank Bldg., Denver	Fluorspar
1905 Mine	Nederland	Jack Payne	Nederland	Tungsten
Ohio (m)	Sugarloaf	Harrison Cobb & A. B. Weldon	401 Pine Street, Boulder	Tungsten
Philadelphia	Nederland	G. Bremmer Adolph Dinkel, E. R. Sena & R. H. Davis	2475 Ames Street, Denver	Tungsten
Poorman	Caribou	Gibson Investment, Inc.	RR, 2 Box 443A, Boulder	Development
Quaker	Sugarloaf	C. H. Smith & Co.	2000 Marine Street, Boulder	Tungsten
Rambler	Nederland	Smith & Rugg	Nederland	Tungsten

Rafter Lease	Sugarloaf	Paul Ruhter	1734 Walnut St., Boulder	Tungsten
Spartan	Jamestown	Rocky Mtn. Mng. & M. Co.	Box 214, Jamestown	Fluorspar
Surprise	Ward	Albert Rasel	517-15th St., Boulder	Exploration
Tenderfoot	Nederland	Langley & Rugs	Nederland	Tungsten
Tungsten	Nederland	Tungsten Mining Co.	420 Pine St., Boulder	Tungsten
Vasco No. 1	Tungsten	P. H. Bennett	1825 Marine St., Boulder	Tungsten
Vasco No. 5	Tungsten	L. & P. Mining Co.	% Robt. Plummer	Tungsten
Victor	Nederland	Barker & Jackson	630 Spruce St., Boulder	Tungsten
World Shaft	Nederland	P. H. Bennett	Box 150, Boulder	Exploration

OPERATING MINES IN CHAFFEE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
American	Brown Canyon	Gen'l. Chem. & Dye Corp.	Box 550, Salida	Fluorspar
Josephine Lode	Buena Vista	Josephine Lode & Dev. Co.	Box 302, Buena Vista	Exploration
MacKeen Claim	Taylor Mtn.	Harold MacKeen	542 G. Street, Salida	Development
Madonna	Monarch	Ute Lode Company	Box 500, Salida	Exploration
Mary Murphy	St. Elmo	S. E. & W. E. Burleson	Box 209, Salida	Gold, Silver, Lead, Zinc
Poncha Springs Fluorspar (m)	Poncha	Reynolds Mining Company	Box 169, Salida	Fluorspar
St. Anne & St. Joseph	McGee	John Klaes	340 Grove St., San Francisco, Calif.	Development
Sedalia	Salida	New Jersey Zinc Co.	Gilman	Exploration
U. S. Fluorspar	Brown Canon	Seymour Mining Company	Vancouver, B. C.	Exploration

OPERATING MINES IN CLEAR CREEK COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Alma Lincoln	Spanish Bar	C. M. Lyon	Wideacres, Golden	Tourist
Diamond Joe	Virginia Canon	{ Wm. Kirschmer Carl J. Crockett	Idaho Springs	{ Gold, Silver, Lead
Dixie (m)	Ute Creek	LeRoy Giles & Co.	Colorado Springs	Gold
Forgehill Tunnel	Virginia Canon	C. E. Morrison	Idaho Springs	Gold
Freighter's Friend	Gilson Gulch	Hafen Leavitt	Rt. 3, Box 367, Golden	Gold, Silver, Lead, Zinc
Golconda Tunnel	Fall River	Henry De Linde	3704 Fenton St., Wheatridge	Gold, Silver, Lead, Zinc
Grizzly Mine (m)	Bakerville	Lupton Mining Co.	Idaho Springs	Lead, Zinc
Grover, Joe	Beaverbrook Canon		Georgetown	Gold, Silver, Lead, Zinc
Headlight	Empire	Joe Grover	Evergreen	Feldspar
Lake West	Virginia Canon	Erne Cotton & Jim Ritchie	Empire	Gold, Silver, Lead, Zinc
Lamertine (m)	Lamertine	Wm. Kirschmer	Idaho Springs	Lead, Zinc
		Montana Mining & Dev. Co.	Manhattan, Montana	Exploration

OPERATING MINES IN CLEAR CREEK COUNTY, 1953—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Lombard	Lombard	Lombard Mines Co.	Idaho Springs	Development
Lone Star	Clear Creek Canon	R. W. Carroll	395 Allison St., Lakewood	Exploration, Gold, and Tourist
Mattie Jack	Dumont	Monarch Mining Trust	416 Cooper Bldg., Denver	Development
Mendota Tunnel	Silver Plume	Mendota-Frostburg Mining Co.	4535 Brighton Blvd., Denver	Silver, Lead, Zinc
Miami (Wilcox)	Idaho Springs	Colo. School of Mines	Golden	Experimental
Level (Big 5)				
Nabob	Lawson	Nabob Mining Co.	% C. R. Froman, Majestic Bldg., Denver	Silver, Lead, Zinc
Oregon	Freeland	Geo. Trader	Idaho Springs	Development
Silver Cloud	Lawson	Andy Riebel	Silver Plume	Exploration
Smuggler	Silver Plume	Mike High Mining	10000 W. 38th Ave., Denver	Silver, Lead, Zinc
Snider, Chas. R.	Beaverbrook Canon	Chas. R. Snider	Evergreen	Feldspar
Stanley	Idaho Springs	Wm. Kirschmer	Idaho Springs	Lead, Zinc, Gold
Trisha Lee	Spring Gulch	Gold Bar Mines, Inc.	Idaho Springs	Granum
Urad	Empire	Molybdenum Corp. of America	500-5th Ave., New York 18, N. Y.	Molybdenum
Zero	Silver Plume	John A. Smith	Silver Plume	Exploration

OPERATING MINES IN CUSTER COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Buckeye	Westcliffe	Buckeye Mining Co.	Westcliffe	Development
Defender	White Hills	Defender Mining Co.	Silver Cliff	Development
Passiflora (Herman Shaft)	Westcliffe	Passiflora Mining Co.	Box 749, Canon City	Exploration
Tantalizer	Spruce Creek	Tantalizer Mining Co.	Box 184, Westcliffe	Development
Tom Boy	Ophir Creek	Chas. & Lyman Akdn	2133 W. 11th Street, Pueblo	Development

OPERATING MINES IN DELTA COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Doty	Delta	Atlas Mining & Mfg. Co.	410 Main Street, Delta	Sulphur

OPERATING MINES IN DOLORES COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Argentine (m)	Rico	Rico Argentine Mining Co.	Rico	Silver, Lead, Zinc
Mountain Springs	Rico	Rico Argentine Mining Co.	Rico	Silver, Lead, Zinc
Silver Swan	Rico	Rico Argentine Mining Co.	Rico	Silver, Lead, Zinc
St. Louis Claim	Rico	Myron Jones & Associates	Rico	Exploration
St. Louis Tunnel	Rico	Rico Argentine Mining Co.	Rico	Silver, Lead, Zinc

OPERATING MINES IN EAGLE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Eagle (m)	Gilman	New Jersey Zinc Co., Empire Zinc Division	Gilman	Lead, Zinc, Silver, Copper
Morning	Gold Park	Swigert & Randall	Box 901, Leadville	Exploration

OPERATING MINES IN FREMONT COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Cotopaxi	Cotopaxi	Roy Knowles	Cotopaxi	Development
Jack of Diamonds	Copper Gulch	Robert E. Harris	1928 E. Orman St., Pueblo	Exploration

OPERATING MINES IN GARFIELD COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
End of the Trail	New Castle	W. L. Weaver	Silt	Uranium
Oil Shale (Plant)	Rifle	U. S. Bureau of Mines	Rifle	Oil Shale

OPERATING MINES IN GILPIN COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Alps	Quartz Hill	Atomic Uranium Corp.	% G. C. Ridland, 405 Interstate Trust Bldg., Denver	Uranium
Calhoun	Quartz Hill	Moreno Cripple Creek Corp.	1009-17th Street, Denver	Gold, Lead, Uranium
Canandaigua (Mae West Tunnel)	Central City	Wm. C. Russell, Jr.	Central City	Gold, Lead
Carroll	Central City	United Mining & Leasing	Central City	Development
Cherokee	Queen Ranch	Moreno Cripple Creek Corp.	1009-17th Street, Denver	Uranium
Eureka, Essex	Central City	United Mining & Leasing	Central City	Uranium
German	Quartz Hill	Intercounty Corp.	405 Interstate Trust Bldg., Denver	Lead, Silver, Zinc
Gold Rock (Springdale)	Russell Gulch	Sandy-Frank Mining Co.	D. J. Young, 810-10th Street, Golden	Uranium
Indianola	Hawkeye Dist.	Mae Woods	Black Hawk	Exploration
Lamberson & Warren	Nevadaville	Wm. C. Russell, Jr.	Central City	Development
Little Colonel	Black Hawk	Jack Turner	Black Hawk	Tourist
Lone Star Lodge	North Clear Creek	Roy H. Addyman	Black Hawk	Development
Lost Gold Mine	Central City	Faye Shobert	Central City	Tourist
Mackey	Toiland	Richard V. Mackey	Box 269, Boulder	Gold, Silver, Copper
Mammoth 114	Central City	Wm. Fackler	Central City	Development
Toll Gate Tunnel	Black Hawk	Mike McNulty	Black Hawk	Tourist
Twin Butte No. 2	Missouri Gulch	Geo. F. Rubicco	629 S. 6th Ave., Mt. Vernon, N. Y.	Development
We-Got-Em	Silver Creek	Gold Chief Mining Co.	% L. E. Toney, Central City	Exploration

OPERATING MINES IN GUNNISON COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
Aaberite	Powderhorn	Titanium Actynite Corp.	% H. O. Aabert, Powderhorn...	Iron with Titanium
Akron	Sargents	Callahan Zinc-Lead Co.	% R. F. Mahoney, Box 299, Wallace, Idaho.	Lead, Zinc
Brown Derby	Parlin	Adolph Poston	4th & Macon, Canon City	Michrolite, Lepidolite, Beryllium
Carter (m)	Ohio City	Kanarado Mng. & Dev. Co.	500 Summer Avenue, Littleton.	Gold, Silver, Lead
Hot Rock Group	Tincup	Hugh Corrigan	Almont	Development
Hubnerite	Top Cumber- land Pass	U. S. Tungsten Co.	Box 910, Salida.	Exploration
Keystone	Crested Butte	American Smelting & Ref. Co.	Crested Butte.	Lead, Zinc
Little Johnny Group	Powderhorn	Rare Earth Mining Co.	320 Equitable Bldg., Denver	Development

OPERATING MINES IN HINSDALE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Hoosier Boy	Lake City	C. J. Van Buskirk	Lake City	Development
Ute & Ulay	Hensen Creek	Idarado Mining Co.	Ouray	Development

OPERATING MINES IN JACKSON COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Northgate (Q) (M)	North Gate	Ozark Mahoning Mining Co.	Cowdery	Fluorspar

OPERATING MINES IN JEFFERSON COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Leyden Shaft	Leyden	Moreno Cripple Creek Corp.	1009-17th Street, Denver.	Development
Oregon Pit	Buffalo	Kirkland Mines Co.	357 So. Perry, Denver	Feldspar
Schwarzwalder	Ralston Creek	Fred Schwartzwalder	207 Boyd Street, Golden	Uranium
Tall Timber	Indian Hills	Tall Timber Mining Co.	Morrison	Beryl-Mica, Feldspar

OPERATING MINES IN LAKE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Antioch Claim	Johnny Hill	Froelich C. Kaiser	106 Harrison Ave., Leadville	Gold
Betty Fraction Lode	Printer Boy Hill	A. M. Gross	6399 Wilshire Blvd., Los Angeles, California	Development
Climax (m)	Climax	Climax Molybdenum Co.	Climax	Molybdenum, etc.
Climax (Glory Hole)	Climax	C. Ryan & Son	Box 7828, Lakewood	Molybdenum, etc.

Dolly B.....	Big Evans Gulch..	John Roberts & Co.....	218 E. 10th St., Leadville.....	Gold, Silver, Lead, Zinc
Eclipse (Ibex Area).....	Leadville	American Smelting & Ref.....	Leadville	Gold, Silver, Lead, Zinc
Fannie Rawlins.....	Johnny Hill.....	W. D. Nelson.....	1031 Marion St., Denver.....	Development
Fortune	Big Evans Gulch..	J. L. Adams.....	328 W. 7th St., Leadville.....	Gold, Silver, Lead, Zinc
Garibaldi Tunnel.....	California Gulch..	Robert L. Jones.....	131 W. 9th St., Leadville.....	Gold, Silver, Lead, Zinc
Hayden Shaft.....	Fryer Hill.....	Caldwell Mining Co.....	2475 Gray Street, Denver.....	Gold, Silver, Lead, Zinc
Helena	Iowa Gulch.....	Resurrection Mining Co.....	Leadville	Development
Ibex No. 4.....	Johnny Hill.....	Ellis Webster.....	400 E. 4th St., Leadville.....	Gold, Silver, Lead, Zinc
Irene No. 2.....	Johnny Hill.....	American Smelting & Ref. Co.....	Leadville	Gold, Silver, Lead, Zinc
Little Alice.....	Long & Derry Hill.	Louis Kostelic.....	203 W. 3rd St., Leadville.....	Gold, Silver, Lead, Zinc
Millie G. No. 1.....	Granite	Sidney & Gilbert Green.....	Granite	Gold, Silver, Lead, Zinc
Nisi Pruis Claim.....	Iowa Gulch.....	Geo. Davis & John Larsh.....	300 Spruce St., Leadville.....	Manganese
Resurrection No. 1 Dump.....	Big Evans Gulch.	Albert Foxall & Co.....	415 E. 17th St., Leadville.....	Gold, Silver, Lead, Zinc
Resurrection No. 2 (m).....	Big Evans Gulch.	{ Resurrection Mining Co.....	P. O. Box 936, Leadville.....	} Gold, Silver, Lead, Zinc
Revenue Cutter Tunnel.....	Little Evans Gulch	{ Robert L. Jones.....	131 W. 9th St., Leadville.....	
Robert Emmett	Stumptown	Edward Mayerle.....	219 E. 8th St., Leadville.....	Gold, Silver, Lead, Zinc
Storke Tunnel.....	Climax	American Smelting & Ref. Co.....	Leadville	Exploration
Yak Tunnel.....	California Gulch..	Gibbons & Reed Boyle Bros.....	Climax	Development
		Resurrection Mining Co.....	Box 936, Leadville.....	Gold, Silver, Lead, Zinc

OPERATING MINES IN LA PLATA COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Bessie G.....	La Plata Mtn.....	Zodomok Mines, Inc.....	Box 452, Durango.....	Gold, Silver

OPERATING MINES IN LARIMER COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Black Hawk.....	Cherokee Park.....	Cherokee Mine Co.....	231 So. Grant St., Ft. Collins.....	Uranium, Tourist

OPERATING MINES IN MESA COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
Arrowhead No. 1	Calamity Mesa	Warren E. Wright and A. C. Rinderle	438 Sherman, Grand Junction.	Uranium, Vanadium
Arrowhead No. 10 & 11	Calamity Mesa	McCormack and T. J. Warner and J. D. Norman & Geo. Wellman	Rt. 3, Grand Junction. % Climax Uranium Co., Grand Junction.	Uranium, Vanadium
Arrowhead 34—Incline 5 Arrowhead 34—Incline 6	Calamity Mesa	Al Rinderle	438 Sherman Drive, Grand Junction.	Uranium, Vanadium
Arrowhead 34—Incline 7	Calamity Mesa	Tex Hughes & Associates	Montrose	Uranium, Vanadium
Arrowhead Incline No. 12	Arrowhead Camp	Fred Zanett Lease	1312 Bunting Avenue, Grand Junction.	Uranium, Vanadium
Arrowhead Incline No. 13	Outlaw Mesa	Al C. Rinderle	438 Sherman Drive, Grand Junction.	Uranium, Vanadium
Arrowhead Incline No. 14	Outlaw Mesa	Al C. Rinderle	438 Sherman Drive, Grand Junction.	Uranium, Vanadium
Belmont	Arrowhead Camp	Ben Zimmerman	Rt. 2940 Patterson Rd., Grand Junction.	Uranium, Vanadium
Black Mammy	Tenderfoot Mesa	Tenderfoot Mining Co.	Gateway	Uranium, Vanadium
Blair	Outlaw Mesa	E. N. Jones	% Leo Mullins, Rt. 1, Fruitvale	Uranium, Vanadium
Blue Bird	Outlaw Mesa	Sutherland & Roper	% Dick Roper, Rt. 3, Grand Junction	Uranium, Vanadium
Blue Ribbon	Calamity Mesa	Joe E. Brown	Montrose	Uranium, Vanadium
Calamity 2 Incline No. 21 and 27	Calamity Mesa	Vernon L. Lehr	Gateway	Uranium, Vanadium
Calamity No. 17	Calamity Mesa	De Bar Shumway	Gen'l. Del., Grand Junction	Uranium, Vanadium
Calamity No. 20	Calamity Mesa	R. C. Bishop	Urayan	Uranium, Vanadium
Emerson	Outlaw Mesa	E. N. Jones & Associates	% Leo Mullins, Rt. 1, Fruitvale	Uranium, Vanadium
G-1 Incline	Outlaw Mesa	Climax Uranium Co.	Grand Junction	Uranium, Vanadium
G-2 Incline	Outlaw Mesa	Climax Uranium Co.	Grand Junction	Uranium, Vanadium
Hansen Incline	Outlaw Mesa	Eugene Bonner	Box 566, Palisade	Uranium, Vanadium
Hidden Treasure	Calamity Mesa	Carl Tucker	Grand Valley	Uranium, Vanadium
July Lease	N.W. Outlaw Mesa	Eugene T. Bonner	Palisade	Uranium, Vanadium
Jumbo No. 2	Outlaw Mesa	Sutherland & Roper	% Dick Roper, Rt. 3, Grand Junction	Uranium, Vanadium
June Claim	N.W. Outlaw Mesa	H. L. Arbogast	Orchard Mesa	Uranium, Vanadium
La Sal No. 1	John Brown Hill	Lee Hetzel & Associates	Clifton	Uranium, Vanadium
La Salle (La Sal) No. 2	John Brown Hill	Geranium Mining Co.	Box 1211, Gateway	Uranium, Vanadium
Little Johnnie	Gateway	Amco Uranium Co.	317 Main St., Grand Junction	Uranium, Vanadium
Lumsden No. 2	John Brown Hill (Gateway)	R. D. Hickman { I. W. Hall	Rt. 1, Grand Junction Gateway	Uranium, Vanadium
Mammoth	Gateway	Loren Jewell	Rifle	Uranium, Vanadium

M. C. No. 10.....	Outlaw Mesa	J. Hicks & Robt. Hanes.....	Rt. 2, Grand Junction.....	Uranium, Vanadium
Mesa No. 5—Incline 1 & 2.....	Outlaw Mesa	Herbert Foster.....	1217 Colo. Avenue, Grand Junction.....	Uranium, Vanadium
Raemarie No. 3.....	Blue Mesa.....	Lee Hetzel.....	Clifton.....	Uranium, Vanadium
Neglected Incline 2 & 3 (Calamity 14).....	Outlaw Mesa	Dan Kelly.....	Rt. 4, Grand Junction.....	Uranium, Vanadium
Negus.....	Outlaw Mesa	Elmer Neilson.....	Ridgway.....	Uranium, Vanadium
Pack Rat.....	John Brown Hill.....	J. B. Crowley & Co.....	850 1/2 N. 1st, Grand Junction.....	Uranium, Vanadium
Pay Rock No. 14.....	Tenderfoot Mesa.....	Clyde & Roy Andress.....	Placerville.....	Uranium, Vanadium
Queen of the Hills.....	Calamity Mesa.....	Wm. Meese & Associates.....	Box 185, Rifle.....	Uranium, Vanadium
Ronnie No. 1.....	Outlaw Mesa	Otis Fincher.....	924 Pine Street, Grand Junction.....	Uranium, Vanadium
Ronnie No. 2.....	Outlaw Mesa	Barnett Bros.....	550 Grand Mesa Avenue, Grand Junction.....	Uranium, Vanadium
Small Spot Drift.....	Calamity Mesa.....	Pete Besman & Floyd Ruby.....	487 Sparr Rd., Fruitvale.....	Uranium, Vanadium
Snowshoe.....	N.E. Outlaw Mesa	Herbert Foster.....	1217 Colorado Avenue, Grand Junction.....	Uranium, Vanadium
Sunflower.....	Outlaw Mesa.....	Herbert Foster.....	1217 Colorado Avenue, Grand Junction.....	Uranium, Vanadium
Yellowjacket No. 2 (Shaft 8).....	Arrowhead	Camp-L. O. Wattenbarger.....	741 Colorado Avenue, Grand Junction.....	Uranium, Vanadium
Yellowjacket No. 9 Incline.....	Arrowhead	Camp-Elmer Neilson & Associates.....	Ridgway.....	Uranium, Vanadium

OPERATING MINES IN MINERAL COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Amethyst.....	W. Willow	Creek-B. P. L. Lease.....	Creede.....	Silver, Lead
Empirius (m).....	W. Willow	Creek-Empirius Mining Co.....	Creede.....	Silver, Lead, Zinc
Equity.....	W. Willow	Creek-Gavin W. Skinner & Assoc.....	Creede.....	Exploration
Holy Moses.....	E. Willow	Creek-Jackson Mining Co.....	Creede.....	Exploration
Monon.....	Sunnyside	Creek-Monon Leasing Co.....	Creede.....	Development
Phoenix.....	E. Willow	Creek-Outlet Mining Co.....	Creede.....	Lead, Zinc

OPERATING MINES IN MOFFAT COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Blue Mtn. No. 4.....	Skull Creek.....	Blue Mtn. Uranium Co.....	% C. E. Hetts, Artesia.....	Exploration, Uranium

OPERATING MINES IN MONTROSE COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
A.E.C. Reserve Block No. 1	Club Mesa.....	Bunker & Co.....	Box 62, Nuela.....	Uranium, Vanadium
Anna May.....	Monogram Mesa.....	A. S. Skalla.....	Nuela.....	Uranium, Vanadium
April No. 1.....	N.W. Bull Canyon.....	C. W. Burbridge.....	Naturaia.....	Uranium, Vanadium

OPERATING MINES IN MONTROSE COUNTY, 1953—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Atkinson Shaft.....	Uravan	Golden Cycle Corp.,	Uranium Div. Box 86, Colo. Springs.....	Development
Baby Fawn.....	So. Rim Bull Canyon	Mark Paulsen.....	Nucula	Uranium, Vanadium
Bitter Creek.....	East Long Park.....	Booth Eckman.....	Naturita	Uranium, Vanadium
Buckhorn No. 1.....	Carpenter Ridge.....	Clyde Wright.....	Paradox	Uranium, Vanadium
C.F.C. & Moonbeam.....	N.C. Long Park.....	Joseph C. Pitt.....	Uravan	Uranium, Vanadium
Dolores.....	Uravan	Van Arsdale & Templeton.....	Nucula	Uranium, Vanadium
Donald L.....	Long Park.....	Milton Castor.....	Naturita	Uranium, Vanadium
Dusty.....	N.E. Rim Long Park	E. R. Frazier.....	Naturita	Uranium, Vanadium
East Opera Box.....	Monogram Mesa.....	Rexroad & Athey.....	Naturita	Uranium, Vanadium
Evening Star.....	S.W. Paradox.....	Four Corners Uranium Corp.....	434 U. S. Nat'l. Bank Bldg., Denver	Uranium, Vanadium
Fawn Spring No. 7.....	S.E. Bull Canyon.....	W. R. Hall.....	Box 214, Naturita	Uranium, Vanadium
Fawn Spring No. 9.....	S.E. Bull Canyon.....	A. F. Skalla.....	Uravan	Uranium, Vanadium
Fawn Spring No. 12.....	S.E. Bull Canyon.....	Glenn Neesham.....	Nucula	Uranium, Vanadium
First National Shaft.....	Central Long Park	L. B. Eugene & Geo. Barnes.....	Box 235, Naturita	Uranium, Vanadium
Fox.....	Uravan	Sturtevant & Williams.....	Box 274, Naturita	Uranium, Vanadium
Gov't Block No. 6.....	Uravan	M. A. Barkley & Co.....	Box 94, Uravan	Uranium, Vanadium
Greagar.....	N.E. Bull Canyon.....	J. R. Simplot & Co.....	Norwood	Uranium, Vanadium
Great Western.....	N.W. Long Park.....	R. C. Bishop.....	Uravan	Uranium, Vanadium
Henry Clay No. 2.....	Central Long Park	John Morrill.....	Uravan	Uranium, Vanadium
Hidden Basin.....	Long Park.....	Vanadium Corp. of America.....	Durango	Uranium, Vanadium
Honeymoon.....	N.W. Rim			
Horse Hair Group.....	Central Bull Canyon	R. C. Bishop.....	Box 424, Uravan.....	Uranium, Vanadium
		Consolidated Uran. Mines, Inc.....	307 Darling Bldg., Salt Lake City, Utah.....	Uranium, Vanadium
Hummer.....	Monogram Mesa.....	Lowell Staats.....	Nucula	Uranium, Vanadium
J. J.....	Monogram Mesa.....	Henry O. Lehr.....	Rt. 1, Grand Junction.....	Uranium, Vanadium
Joe Dandy.....	Monogram Mesa.....	I. R. Ford.....	Naturita	Uranium, Vanadium
Joe Junior.....	Club Mesa.....	Frank Fadel.....	Box 473, Uravan.....	Uranium, Vanadium
La Salle.....	Uravan	La Salle Mining Co.....	1st Nat'l. Bank Bldg., Grand Junction.....	Uranium, Vanadium
Little Basin.....	Uravan	Harold Kincade.....	Box 74, Uravan.....	Uranium, Vanadium
Little Dick.....	Uravan	Frank Elder.....	Telluride	Uranium, Vanadium
Log Cabin.....	Central Bull Canyon	Glenn Gregor.....	Naturita	Uranium, Vanadium
Long Park No. 1.....	So. Long Park.....	R. D. Johnson.....	Naturita	Uranium, Vanadium
Long Park No. 6.....	Central Long Park	E. T. Holdeman.....	Uravan	Uranium, Vanadium
Maggie C.....	N.C. Long Park.....	G. E. Castor & Assoc.....	Nucula	Uranium, Vanadium
Mill No. 2.....	Club Mesa.....	J. & M. Jabernick & Assoc.....	Box 484, Uravan.....	Uranium, Vanadium

Mineral Joe Incline.....	E. Rim Monogram Mesa.....	Fred Richard & Paul Willoby.....	Nuclea.....	Utah.....	Vanadium
North Hummer.....	Monogram Mesa.....	Clarence Fay & Assoc.....	Naturita.....	Utah.....	Vanadium
Ophir No. 1 & 2.....	Uravan.....	R. L. Sage.....	Box 156, Nuclea.....	Utah.....	Vanadium
Oversight.....	Monogram Mesa.....	William Barnett.....	Uravan.....	Utah.....	Vanadium
Patty No. 5.....	Central Bull Canyon.....	Consolidated Uranium Mines, Inc.....	307 Darling Bldg., Salt Lake City, Utah.....	Utah.....	Vanadium
Peanut.....	S.E. Bull Canyon.....	J. R. Simplot Co.....	Norwood.....	Development	Vanadium
Production.....	N.C. Long Park.....	H. W. Johnson.....	Nuclea.....	Development	Vanadium
Red Bird.....	Carpenter Ridge.....	A. E. & L. G. David.....	Silverton.....	Utah.....	Vanadium
Red Flash No. 6 Incline.....	N.W. Bull Canyon.....	R. S. Dunn & Assoc.....	Ouray.....	Utah.....	Vanadium
Republican.....	N.C. Long Park.....	Vanadium Corp. of America.....	Durango.....	Utah.....	Vanadium
Rim Rock.....	S.E. Bull Canyon.....	W. P. Jones & C. L. Mikesell.....	Blanding, Utah.....	Utah.....	Vanadium
Rim Rock Blues No. 2.....	N.W. Bull Canyon.....	Keith Andrews & Son.....	Nuclea.....	Utah.....	Vanadium
Rim Rock Blues No. 5.....	N.W. Bull Canyon.....	Bob Ebbs.....	Box 236, Naturita.....	Utah.....	Vanadium
Rock Creek.....	Rock Creek.....	Vanadium Corp. of America.....	Durango.....	Utah.....	Vanadium
St. Patrick.....	N.C. Long Park.....	Clarence Neilson.....	Uravan.....	Utah.....	Vanadium
Sandy.....	Uravan.....	Douglas Smith & D. Cleghorn.....	Box 502, Uravan.....	Utah.....	Vanadium
Shattuck Denn Shaft.....	Uravan.....	Shattuck Denn Mng. Corp.....	Uravan, Colo., and 120 Broadway, N. Y.....	Development	Vanadium
Starlight No. 7.....	N.W. Bull Canyon.....	Jeff Brumley & Assoc.....	Box 781, Cortez.....	Utah.....	Vanadium
Starlight No. 8.....	N.W. Bull Canyon.....	Glenn Gregor.....	Naturita.....	Utah.....	Vanadium
Sunrise No. 3.....	Central Bull Canyon.....	Lee Elder.....	Box 76, Uravan.....	Utah.....	Vanadium
Sunrise No. 4.....	Central Bull Canyon.....	Wm. Moore.....	Naturita.....	Utah.....	Vanadium
Teapot Dome.....	S.W. Bull Canyon.....	Carl Mangum & Assoc.....	Blanding, Utah.....	Utah.....	Vanadium
Thunderbolt.....	N.E. end of Monogram Mesa.....	Henry O. Lehr.....	Rt. 1, Grand Junction.....	Utah.....	Vanadium
T.N.T. No. 1.....	N.C. Long Park.....	J. L. Bran.....	Blanding, Utah.....	Utah.....	Vanadium
T.N.T. No. 3.....	N.C. Long Park.....	Tim Fisher.....	Nuclea.....	Utah.....	Vanadium
Triangulation.....	Uravan.....	E. E. Walker.....	Box 36, Uravan.....	Utah.....	Vanadium
Tripod.....	S.E. Long Park.....	D. C. Bunker & Assoc.....	Nuclea.....	Utah.....	Vanadium
Vanadium King.....	N.W. Long Park.....	Chas. & Elwin Flowelling.....	Box 905, Uravan.....	Utah.....	Vanadium
Virgin Shaft.....	Central Long Park.....	O. E. Smart & C. Crandall.....	Naturita.....	Utah.....	Vanadium
Wedge.....	E.C. Long Park.....	O. L. Cerney.....	Uravan.....	Utah.....	Vanadium
West Opera Box.....	La Salle Creek.....	R. D. Hickman & Assoc.....	Paradox.....	Utah.....	Vanadium
Whitney Shaft.....	Monogram Mesa.....	Clark, Harrison & Higgins.....	Naturita.....	Utah.....	Vanadium
Wild Steer.....	S.E. Long Park.....	Bielz & Shodgrass.....	Naturita.....	Utah.....	Vanadium
Worcester Shaft.....	Monogram Mesa.....	Roy Andress & Assoc.....	Norwood.....	Development	Vanadium
Yellow Bird.....	Uravan.....	Harold Worcester & Assoc.....	625 N. 3rd, Montrose.....	Utah.....	Vanadium
Zebra.....	La Salle Creek.....	Vanadium Corp. of America.....	Durango.....	Utah.....	Vanadium
	S.E. Bull Canyon.....	W. P. Jones & C. L. Maxwell.....	Blanding, Utah.....	Utah.....	Vanadium

ADDENDUM—MONTROSE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Elva M. No. 2		{ Herman Conrow. Harold A. Dull.	{ Rt. 3, Grand Junction. Box 446, Moab, Utah.	{ Uranium, Vanadium
Captain Jack		{ Q. R. Hurst. R. M. Wright.	{ Blanding, Utah. Moab, Utah.	{ Uranium, Vanadium
Matchless	Gateway	{ E. E. Horn & R. C. Simms. Jack Richard.	{ Box 743, Rifle. Gateway	{ Uranium, Vanadium

OPERATING MINES IN OURAY COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Altoona Group (m)	Sneffels	T. Colvin Mining Co.	Ouray	Silver, Lead, Zinc
Camp Bird (m)	S. E. of Ouray	King Lease, Inc.	Ouray	Lead, Zinc, Copper
Dunmore	So. of Ouray	W. E. Brewster & Albert Robitsch.	Ouray	Exploration
Edna No. 1	Ironton Park	St. Germain Foundation	Box 545, Ouray	Exploration
Idarado (m)	So. of Ouray	Idarado Mining Co.	14 Wall Street, New York, N. Y., and Ouray, Colo.	Gold, Silver, Copper
Magnet	Ironton Park	Gail Moore & Dan Briggs	Ouray	Silver, Lead, Zinc
Patsy	W. of Ironton Park	Earl Alexander	Ouray	Lead, Zinc, Copper
Revenue	Sneffels	Revenue Mines Co.	Box 545, Ouray	Exploration

OPERATING MINES IN PARK COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Buckskin Joe	Buckskin Gulch	Buckskin Joe Mines, Ltd.	Alma	Silver, Gold, Copper, Lead, Zinc
Hilltop (Dauntless Tunnel)	Horseshoe	Leadville Lead Corp.	2812 E. 6th Ave., Denver	Exploration
Ling Group	North Star Mtn.	Cordillera Corp.	Fairplay	Gold

OPERATING MINES IN RIO BLANCO COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Brown Claim, Marvine No. 10 & Shylo	N. E. of Meeker	Devereaux Bros.	Meeker	Uranium, Vanadium
Burrell No. 1	N. E. of Meeker	Tungsten Uranium, Inc.	1301 S. W. 5th Ave., Portland, Oregon	Uranium, Vanadium
Midnight (North Block)	E. of Meeker	Ray Hasselbush & Henry Ziesenheim	Box 149, Rifle	Uranium, Vanadium
Midnight (South Block)	E. of Meeker	Carl H. Klinglesmith	Box 424, Rifle	Uranium, Vanadium
Windy Point No. 1	Uranium Peak	Jim La Donne	Rifle	Uranium, Vanadium

OPERATING MINES IN RIO GRANDE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Summitville	Summitville	Resurrection Mining Co.	Leadville	Exploration

OPERATING MINES IN SAGUACHE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Bear Creek Mining Co.	Greenback Mtn.	Bear Creek Mining Co.	1219 California St., Denver	Exploration
California Mine (Twins)	Flagstaff Mtn.	W. J. Timney & Joe G. O'Brien	811 Shetland Road, Las Vegas, Nevada	Exploration
Cocomongo	Bonanza	Leonard Deay-Reusch	Box 854, Salida	Exploration
Cora Claim	Rawley Gulch	Walter Timney	811 Shetland Road, Las Vegas, Nevada	Development
La Garita (m)	Crystal Hill	La Garita Mines	Box 61, La Garita	Gold
Rawley	Rawley Gulch	Wm. J. Costello	Villa Grove, Bonanza Route	Silver, Copper, Lead, Zinc
Sky City	Big Park	Wannamaker Mng. & Milling Company	Box 246, Saguache	Development
Vallejo	Sosthenes Gulch	Johnston Mining Co.	Bonanza	Exploration
Villa Grove Turquoise	Villa Grove	Villa Grove Turquoise Lode	Villa Grove	Turquoise

OPERATING MINES IN SAN JUAN COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
Black Hawk	Gladstone	Henry P. Ehrlinger	Silverton	Silver, Lead, Zinc
Garry Owen	Cunningham Gulch			
Gold Prince (m)	Silverton	Old Hundred Gold Mng. Co.	Box 448, Silverton	Development
Graysill Group	Hermosa Creek	Venture Leasing Co.	Silverton	Silver, Lead, Zinc
Great Eastern	Eureka	Vanadium Corp. of America	Durango	Uranium, Vanadium
Henrietta	Silverton	Great Eastern Mng. Co.	Silverton	Silver, Lead, Zinc
Hercules	Silverton	United States Metals Co.	Silverton	Silver, Lead, Zinc
		Galbre Boy Mine, Inc.	Silverton	Gold, Silver, Copper, Zinc, Lead
Kansas City	Gladstone	Graham Mines Co.	Silverton	Exploration
Lark	N. of Silverton	Columbine Leasing Co.	Silverton	Silver, Lead, Zinc
Lead Carbonate	Gladstone	Lead Carbonate Mines, Inc.	Silverton	Silver, Lead, Zinc
London	Above Animas Forks	William Erickson	Silverton	Gold, Silver, Lead, Zinc
Lower Kochler Tunnel	Red Mtn. Pass	Eastridge Mng. Co.	Ouray	Exploration
May Day	Silverton	Ennis Cole & Assoc.	Box 561, Silverton	Silver, Lead, Zinc
Ohio (Dump) (m)	Gladstone Road	Williams & Walby	Silverton	Tungsten
Oscola	Cunningham Gulch	T. S. Hadden & Assoc.	Silverton	Gold, Silver, Lead

OPERATING MINES IN SAN JUAN COUNTY, 1953—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Pride of the West.....	Cunningham Gulch.....	Pride of the West, Inc.....	Frank Hitti, Agent, Silverton.....	Gold, Silver, Lead
Shenandoah Dives (m).....	Silverton.....	Shenandoah Dives Mng. Co.....	Silverton.....	Gold, Silver, Copper, Lead
Thelma.....	Silver Ledge.....	Paul Hoffman & Assoc.....	Silverton.....	Silver, Lead, Zinc
Treasure Mountain.....	N.E. of Silverton.....	Treasure Mtn. Gold Mng. Co.....	801 Midland Savings Bldg., Denver.....	Exploration

OPERATING MINES IN SAN MIGUEL COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
American Eagle.....	Little Gypsum Valley.....	Oliver Brothers.....	Naturita.....	Uranium, Vanadium
Andrus.....	S.W. of Ouray.....	The Eaglebridge Co.....	Ouray.....	Exploration
Ann No. 1 Incline.....	Slick Rock Hill.....	Wm. J. Burwell.....	Egnar.....	Uranium, Vanadium
Bald Eagle.....	Gypsum Valley.....	J. L. McCullah.....	Redvale.....	Uranium, Vanadium
Bean Patch.....	O'Neill Group.....	{ C. L. Lewis, Contractor for: Parker Mining & Dev. Co.....	Dove Creek.....	} Uranium, Vanadium
Black Jack (Legion Group) Slick Rock.....	Dulaney Mng. Co.....	312 1st Nat'l. Bank Bldg., Grand Junction.....	Grand Junction.....	
Bob Tail.....	Telluride.....	Idarado Mining Co.....	Ouray.....	Uranium, Vanadium
Brighton.....	O'Neill Group.....	Joseph Barnes.....	Uravan.....	Lead, Silver, Zinc
Butterfly (m).....	Ophir Loop.....	Delbert McClusky & Assoc.....	Telluride.....	Uranium, Vanadium
Canfield, A. H.....	Slick Rock Hill.....	A. H. Canfield & Assoc.....	Dove Creek.....	Silver, Lead, Zinc
Carbenero.....	Ophir.....	Silver Bell Mines Co.....	Ophir.....	Uranium, Vanadium
Couger Lower Shaft.....	Couger Group.....	E. J. Robinett.....	Egnar.....	Gold, Silver, Lead, Zinc
Couger Group.....	Slick Rock.....	Henry Holling.....	Egnar.....	Uranium, Vanadium
Early Morn.....	Upper Gypsum Valley.....	Frank Myddelton.....	Nucula.....	Uranium, Vanadium
Ellison.....	Slick Rock Bridge.....	Blue Creek Mining Co.....	618 Rood Ave., Grand Junction.....	Uranium, Vanadium
Elouisa Incline.....	Slick Rock Hill.....	W. R. McCormick.....	Dove Creek.....	Uranium, Vanadium
Falcon (Legion Group).....	Slick Rock.....	Uranium Metals, Inc.....	Dove Creek.....	Uranium, Vanadium
Full Moon.....	2 mi. S. Slick Rock Geo. Hazen.....	Egnar.....	Box 18, Egnar.....	Uranium, Vanadium
Golden Rod No. 4.....	Egnar.....	Johnson & Hargrove.....	Dove Creek.....	Uranium, Vanadium
Gorgeto.....	Slick Rock Hill.....	Jack C. Turner.....	Moab, Utah.....	Uranium, Vanadium
Hawk.....	Slick Rock Hill.....	Wm. J. Burwell.....	Egnar.....	Uranium, Vanadium
Hawkeye.....	Dolores Riv. at Slick Rock.....	Duncan & Sanchez.....	Dove Creek.....	Uranium, Vanadium
Helon Claim Incline No. 1.....	Slick Rock.....	San Juan Leasing Co.....	Uravan.....	Uranium, Vanadium
Hot Shot.....	Bull Canyon.....	Homer Rosenquist.....	Box 223, Naturita.....	Uranium, Vanadium
Jack Knife No. 3.....	Bull Canyon.....	Robert Williams.....	Norwood.....	Uranium, Vanadium

Japan Flora.....	Telluride	F. George & F. Zanett.	Ouray	Uranium,	Vanadium
Joker.....	Little Gypsum Valley	Elbert A. Short.	Placerville	Uranium,	Vanadium
Jupiter.....	Egnar	John Ledlow.	Naturita	Uranium,	Vanadium
King No. 2 Incline 3 & 4	Slick Rock Hill.	Tom Skidmore.	Box 311, Dove Creek.	Uranium,	Vanadium
King No. 2, 3 & 4 Incline (Frenchie)	Slick Rock Hill.	Ortmayer Mining Co.	1037 Ouray Ave., Grand Junction.	Uranium,	Vanadium
Leopard Creek Group	Leopard Creek.	Vanadium Corp. of America.	Naturita	Uranium,	Vanadium
Lone Ridge.....	Gypsum Valley.	J. L. McCullah.	Redvale	Uranium,	Vanadium
Lookout.....	Ham Canyon.	H. A. Hollen & Assoc.	Pleasant View.	Uranium,	Vanadium
Lost Claim.....	Little Gypsum Valley	William Story, Jr.	Naturita	Development	
Main Street.....	Bull Canyon.	M. R. Conley & Melvin Rogers.	Box 84, Norwood.	Uranium, Silver,	
Melidrum Tunnel.	Telluride	Idarado Mining Co.	Ouray	Lead, Zinc	
Middle Group.....	Dolores Riv. at Slick Rock.	M. R. Watters.	Dolores	Uranium,	Vanadium
Nelson & Larson	Egnar	G. W. Nelson & J. L. Larson.	Egnar	Uranium,	Vanadium
Norma Jean No. 1.....	Egnar	George Hazen.	Egnar	Uranium,	Vanadium
O'Neill Radium Group	Slick Rock Hill.	Dulaney Mining Co.	1st Nat'l Bank Bldg., Grand Junction.	Uranium,	Vanadium
Otero Incline.....	Slick Rock Hill.	W. R. McCormick.	Dove Creek.	Uranium,	Vanadium
Parrot.....	8 mi. S.E. Slick Rock	Consolidated Uranium Mines, Inc.	307 Darling Bldg., Salt Lake City, Utah.	Uranium,	Vanadium
Radium 7.....	O'Neill Group.	Fitz Wright.	Box 249, Naturita.	Uranium,	Vanadium
Silver Bell (m).	Ophir Loop.	Silver Bell Mines Co.	Ophir	Lead, Zinc, Gold, Silver, Tungsten	
Sky Lark.....	Little Gypsum Valley	Melvin Brewer.	Dove Creek.	Uranium,	Vanadium
Tail Hold.....	6 mi. above Slick Rock.	Skidmore Mining Co.	Box 311, Dove Creek.	Uranium,	Vanadium
Telluride (m)	Telluride	Telluride Mines, Inc.	Telluride	Gold, Silver, Lead, Zinc	
Tom Boy.....	O'Neill Group.	Fitz Wright.	Box 249, Naturita.	Uranium,	Vanadium
Veta Wad.....	Slick Rock Hill.	Allen Hopkins	Egnar	Uranium,	Vanadium
Veta Wad No. 2	Slick Rock.	Gayno Mining Co.	730 N. 3rd St., Montrose.	Uranium,	Vanadium

OPERATING MINES IN SUMMIT COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Alice Blue Gown.....	Breckenridge	Wm. Nelson Bersonnet, Jr.	Breckenridge	Exploration
Cecil & Betty Jean Lode	Montezuma	Ralph Terrill & Assoc.	Montezuma	Manganese
Chataqua (m)	Montezuma	Sally Barber Mining Co.	Box 158, Breckenridge.	Lead, Zinc
Big Four (Kyle & Thomas)	Heeney	Kyle & Thomas.	Box 8, Heeney.	Development
				Lead, Zinc

OPERATING MINES IN SUMMIT COUNTY—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Little Hope.....	South Swan	A. R. Wright & Son.	Jefferson	Development
New Recruit.....	Montezuma	Elmer Josephson	Evergreen	Development
Owl Tunnel.....	Breckenridge	Jim B. Pearce	69 So. Pearl St., Denver	Development
Paymaster.....	Montezuma	Fred Harris & Pat & Mike Vinson	Breckenridge	Lead, Zinc
Pittsburgh.....	Breckenridge	M. K. Gaymon & James P. Webb	Breckenridge	Lead, Zinc
Preston Tunnel.....	Montezuma	A. R. Rhine	2550 Yarrow St., Denver	Development
Pride of the Mountain.....	Georgia Pass	Horn Brothers	Montezuma	Silver-Moly.
Queen of the West.....	Kokomo	Ivanhoe Trust	Kokomo	Development
St. John.....	Montezuma	Elvin Oelrich	Montezuma	Silver, Lead, Zinc
Silver King (m).....	Montezuma	John M. Jeffery	Montezuma	Silver, Lead, Zinc
Wellington.....	Breckenridge	W. L. Davenport	Box 192, Breckenridge	Gold, Silver, Lead, Zinc

OPERATING MINES IN TELLER COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
Ajax (m).....	Battle Mtn.	Golden Cycle Corp.	P. O. Box 127, Cripple Creek	Gold
Ajax Lease.....	Battle Mtn.	Gold Coin Leasing Co.	Cripple Creek	Gold
Annaconda Tunnel.....	Annaconda	Gulch-LeClair Con. Mines Co.	Box 127, Cripple Creek	Exploration
Carbonate Queen.....	Battle Mtn.	Acme Mining Co.	156 Montgomery Street, San Francisco, Calif.	Gold
Chicago Tunnel.....	Globe Hill	Globe Hill Min. Co.	333 Independence Bldg., Colorado Springs	Development
Cresson.....	Raven Hill	Cresson Cons. Gold Mining Co.	Box 127, Cripple Creek	Gold
Cresson Lease.....	Raven Hill	Trail Creek Mines, Inc.	Cripple Creek	Gold
Deadwood.....	Bull Hill	Deadwood Leasing Co.	Cripple Creek	Gold
E. Porter Gold King.....	Gold Hill	Doepke Mining Co.	2431 N. Nevada, Colorado Springs	Development
Gold King.....	Cripple Creek	Cripple Creek M. & M. Co.	Box 247, Cripple Creek	Gold-Tourist
Gold Sovereign.....	Bull Hill	Gold Sovereign Mng. Co.	Cripple Creek	Development
Independence.....	Battle Mtn.	United Gold Mines	Box 127, Cripple Creek	Exploration
Isabella.....	Bull Hill	Isabella Mines, Inc.	Cripple Creek	Development
Isabella Dump.....	Bull Hill	Carl E. Zaring	948 E. Las Animas St., Colorado Springs	Gold
King Solomon.....	Cripple Creek	Merritt K. Ruddock	Box 1, Florissant, Colorado Springs	Development
Little May Tunnel.....	Beacon Hill	John Robush & Co.	Box 205, Cripple Creek	Gold
Mary McKinney Dump.....	Gold Hill	Le Clair Consolidated Mines Co.	Box 127, Cripple Creek	Gold
Molly Kathleen.....	Tenderfoot Hill	Markley M. & Expl. Co.	Cripple Creek	Gold-Tourist
Portland Surface Shaft.....	Battle Mtn.	Isabella Mines, Inc.	Cripple Creek	Development
Portland No. 1 Shaft.....	Battle Mtn.	United Gold Mines	Box 127, Cripple Creek	Gold
Strong.....	Victor	Front Range Mines	1536 Welton St., Denver	Gold
Tilden.....	Straub Mtn.	F & F Mining Co.	Victor	Gold
Vindicator Group.....	Battle Mtn.	United Gold Mines	Box 127, Cripple Creek	Gold

(m) Denotes Mill operating in connection with Mine.

OPERATING QUARRIES IN BOULDER COUNTY, 1953

Name of Quarry	Location	Operator	P. O. Address	Product
Clemen's	Left Hand Creek	Conda & Bingeman	Lyons	Sandstone
Comstock Peat Lode	Nederland	McCoy & Jensen	Morrison	Peat
Hall	Lyons	University of Colo.	% R. W. Lind, Bldg. 208, Boulder	
Jacobson-Evans Stone Co.	Lyons	Jacobson-Evans Stone Co.	P. O. Box C, Lyons	Sandstone
Left Hand Peat Co.	Ward	Left Hand Peat Co.	Box 336, Boulder	Sandstone
Pickett	N. Left Hand Crk.	University of Colo.	U. G. C., Bldg. 220, Boulder	Peat
Red Stone	Lyons	Colorado Stone Co.	1645 Main St., Loveland	Sandstone
St. Vrain	Lyons	K. C. Brodie	Box 325, Lyons	Sandstone
Summers	Lyons	Dewey H. Summers	Box 124, Lyons	Sandstone
White Stone	Lyons	Jess A. Vickery	Lyons	Sandstone

OPERATING QUARRIES IN CHIAFFEE COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Calcium	Ute Trail Salida	Calcium Company	Box 910, Salida	Calcium
Crystal Stone Placer	Ute Trail	Colo. Granite Co.	348 West 5th St., Salida	Granite
Monarch Lime	Salida	Colorado Fuel & Iron Co.	Garfield	Limestone
Mt. Princeton Granite	Mt. Princeton Hot Springs	Calcium Company	Box 910, Salida	Granite
Soda Spar (Homestake)	Salida	M. & S. Inc.	Box 671, Salida	Feldspar
Warner's	Cameron Mt. Dist.	James Warner	Rainbow Bldg., Salida	Granite

OPERATING QUARRIES IN COSTILLA COUNTY, 1953

Name of Quarry	Location	Operator	P. O. Address	Product
Colo. Aggregate Co.	Mesita	Colo. Aggregate Co., Inc.	Mesita	Volcanic Cinder

OPERATING QUARRIES IN CUSTER COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Delano	Bel. Texas Creek & Hillside	Coleman Brothers	111 N. Farragat St., Colorado Springs	Monumental Granite
Greene	Rosita	Great Lakes Carbon Corp.	Box 291, Florence	Perlite
Wilfley	Rosita	Great Lakes Carbon Corp.	Box 291, Florence	Perlite

OPERATING QUARRIES IN DOUGLAS COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Helmer Limestone	Littleton	Helmer Bros.	Box 94, Littleton	Limestone and Silica Sand

OPERATING QUARRIES IN EAGLE COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Colo. Lava Products.....	Dotsero	Colo. Lava Products.....	Box 128, Gypsum.....	Volcanic Cinder

OPERATING QUARRIES IN EL PASO COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Lennox Breed.....	Pikeview	Golden Cycle Corp.....	Carlton Bldg., Colorado Springs.....	Crushed Rock
Little Fountain Creek.....	Colo. Springs.....	Nixon Bros.....	2327 W. Kiowa, Colorado Springs.....	Crushed Rock and Fire Clay

OPERATING QUARRIES IN FREMONT COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
American Crystal.....	Taylor Gulch.....	Frank H. Norberg Co.....	703 U. S. Nat'l. Bank Bldg., Denver.....	Limestone
Aspen Ridge.....	Whitehorn Dist.....	V. D. Coleman & Co.....	225 W. Cimarron, Colorado Springs.....	Monumental Granite
Burnito	Canon City.....	Ray Sturbaum & Son.....	Canon City.....	Silica Rock
Calcite	Howard	Colo. Limestone Co.....	Box 8, Howard	Limestone
Canon Dolomite.....	Canon City.....	Colo. Fuel & Iron Co.....	Pueblo	Dolomite
Coaldale	Coaldale	Nat. Senatore.....	Penrose	Gypsum
Colorado Springs.....	Salt Canyon.....	Nat. Senatore.....	Box 387, Canon City.....	Gypsum
Colorosa Travertine.....	Canon City.....	Colonna & Co. of Colo.....	Box 387, Canon City.....	Marble
Cowan Bros. Travertine.....	Canon City.....	J. E. & David Cowan.....	227 Main St., Canon City.....	Feldspar, Rose Quartz, Mica and Beryl
Devil's Hole.....	Texas Creek.....	Kenneth R. Cox.....	Box 431, Canon City.....	Marble
English (Wellsville).....	English Siding.....	Colonna & Co. of Colo.....	Box 387, Canon City.....	Monumental Stones
Freek Marble.....	Garden Park.....	Cowan Bros.....	227 Main St., Canon City.....	Silica Rock
Ganister	Temple Canyon.....	Ralph Pierce.....	Canon City.....	Feldspar
June Rose.....	Copper Gulch.....	Schmidt-Wedel	Westcliffe	Mica, Feldspar
Mica Lode.....	Canon City.....	Lockhart & Son.....	Box 521, Canon City.....	Mica, Feldspar
Oak Creek.....	Sand Gulch.....	V. D. Coleman & Co.....	225 W. Cimarron, Colorado Springs.....	Monumental Granite
Phanton Lode.....	Phanton Canyon.....	Phanton Lode Mng. Co., Inc.....	Box 209, Rt. 1, Canon City.....	Feldspar-Mica, Beryl
Penrose	Salt Canon.....	Dale Hoover.....	1015 Harrison St., Canon City.....	Silica Rock
Portland	Portland	Ideal Cement Co.....	Denver Nat'l. Bank Bldg., Denver	Sandstone, Shale, Limestone
Royal Gorge Granite.....	6 mi. W. Canon City.....	Cowan Bros.....	227 Main St., Canon City.....	Granite
Spikebuck	W. of Canon City.....	Louis Arko & R. C. Kennedy.....	Box 726, Canon City.....	Feldspar

Texas Creek View.....	Texas Creek Station.....	Isabell & Son.....	1009 Elm St., Canon City.....	Feldspar, Mica, Beryl
Trail Gulch.....	Garden Park.....	Colonna & Co.....	Canon City.....	Marble
Tumble Mountain.....	Wellsville.....	U. S. Soil Conditioning Co.....	Rainbow Bldg., Salida.....	Gypsum

OPERATING QUARRIES IN GARFIELD COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Glenwood Lime.....	Glenwood Springs	Frank H. Norberg & Co.....	703 U. S. Nat'l. Bank Bldg., Denver.....	Limestone

OPERATING QUARRIES IN GILPIN COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Rudolph Ranch.....	The Gap.....	Gus Rudolph.....	Black Hawk.....	Peat

OPERATING QUARRIES IN JEFFERSON COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Big Bertha.....	Buffalo Creek.....	R. V. McGuire.....	Buffalo Creek.....	Feldspar
Bigger's Mica Mine Quar.....	Tiny Town.....	Waltz & Hewitt.....	Rt. 2, Morrison.....	Feldspar, Mica, Beryl
Ken-Caryl Lease.....	Tiny Town.....	Wilson, Prosser & Provo.....	Box 232, Rt. 1, Morrison.....	Beryl, Feldspar, Mica

OPERATING QUARRIES IN LAKE COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Hayden Ranch.....	Hayden Ranch.....	Mt. Elbert Peat Moss Co.....	Leadville.....	Peat Moss
Pine View Placer.....	Leadville.....	Dale Hoover.....	Parkdale.....	Silica Rock
Silica Placer.....	Tennessee Gulch.....	Dale Hoover.....	Parkdale.....	Silica Rock

OPERATING QUARRIES IN LARIMER COUNTY, 1953

Name of Quarry	Location	Operator	P. O. Address	Product
Arkins.....	Masonville.....	Colo. Stone Co.....	Box 596, Longmont.....	Sandstone
Berthoud.....	W. of Berthoud.....	Colo. Stone Co.....	Box 596, Longmont.....	Sandstone
Clark's.....	Owl Canyon.....	Frank H. Norberg & Co.....	703 U. S. Nat'l. Bank Bldg., Denver.....	Limestone
Goodwin.....	Ft. Collins.....	Ernest W. Munroe.....	Rt. 2, Box 273, Ft. Collins.....	Gypsum
La Porte.....	La Porte.....	Ideal Cement Co.....	Denver Nat'l. Bank Bldg., Denver.....	Limestone
Loukonen.....	Lyons.....	Loukonen Bros.....	Rt. 2, Longmont.....	Sandstone
Masonville Gray.....	Masonville.....	C. W. Weaver.....	759 S. York Street, Denver.....	Sandstone
Online.....	Lyons.....	Arthur Online.....	Box 314, Lyons.....	Sandstone
U. S. Gypsum.....	W. of Loveland.....	U. S. Gypsum Co.....	300 W. Adams, Chicago, Ill.....	Gypsum

OPERATING QUARRIES IN LAS ANIMAS COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Red Rock.....	25 mi. SW Higbee, Colo.	Alabaster Lamp Mfg. Co.	901 W. 4th Street, La Junta	Alabaster

OPERATING QUARRIES IN TELLER COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Divide Peat Bog.....	Divide	Soll-N-Rich Co., M. B. Martin	2695 W. Colorado Avenue, Colorado Springs	Peat
Gillette Peat Bog.....	Gillette	Western States Peat & Fertilizer Co.	2108 W. Cucharas, Colorado Springs	Peat
Limber Pine.....	N.W. Woodland Park	Wes Earhart & Glenn Spielman	Woodland Park	Feldspar
Lost Dutchman.....	Rampart Range Rd.	Glenn Spielman	Woodland Park	Feldspar
Peat Bog.....	Divide	Western States Peat & Fertilizer Co.	2108 W. Cucharas, Colorado Springs	Peat
Pikes Peak.....	W. of Cripple Crk.	Pikes Peak Granite Co.	126½ E. Pikes Peak Ave., Colorado Springs	Building Stone

OPERATING CLAY MINES AND PITS IN BOULDER COUNTY, 1953

Name of Mine	Location	Operator	P. O. Address	Product
Rocky Flats Clay Pit.....	Marshall	Longmont Brick & Tile Co.	Box 727, Longmont	Clay

OPERATING CLAY MINES AND PITS IN DOUGLAS COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Helmer Clay.....	Littleton	Helmer Bros.	Box 94, Littleton	Fire Clay
Hillside.....	Waterton	W. H. Hedley	3726 Newton St., Denver	Clay
Hogback.....	Waterton	Robinson Brick & Tile Co.	500 So. Santa Fe, Denver	Clay and Fire Clay
Johnson Clay.....	Castle Rock	Stroud Wisenbunt	Castle Rock	Plastic Clay
Stevens Ranch Clay Pit.....	Castle Rock	Stroud Wisenbunt	Castle Rock	Plastic Clay

OPERATING CLAY MINES AND PITS IN EL PASO COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Apache No. 5.....	Calhan	Robinson Brick & Tile Co.	500 So. Santa Fe, Denver	Clay
Hecla Clay Pit.....	Husted	Glen A. Scribner	Rt. 3, Box 116, Colorado Springs	Clay
Little Fountain Creek.....	Colo. Springs	Nixon Bros.	2327 W. Kiowa, Colorado Springs	Clay

OPERATING CLAY MINES AND PITS IN FREMONT COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Flint	Canon City	C. E. Goodale	2121 N. 9th Street, Canon City	Fire Clay

OPERATING CLAY MINES AND PITS IN JEFFERSON COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Chieftain	5 mi. W. Denver	Robinson Brick & Tile Co.	500 So. Santa Fe, Denver	Fire Clay
Cowan's Clay Pit	Morrison	Montgomery Bros.	1208 So. Mariposa, Denver	Clay
Denver Terra Cotta	Golden	Denver Terra Cotta Co.	135 Tejon Street, Denver	Plastic Clay
Golden Clay Mining Co.	Golden	Golden Clay Mining Co.	Box 292, Golden	Fire Clay, Plastic Clay
Johnson Clay Mine No. 1	Golden	Denver Sewer Pipe & Clay Co.	4501 Fox Street, Denver	Clay
Johnson Clay Mine No. 2	Golden	Denver Sewer Pipe & Clay Co.	4501 Fox Street, Denver	Clay
Lakewood Brick Co.	Golden	Lakewood Brick Co.	1325 Jay Street, Denver	Clay
Lindsey Clay Mine	Golden	Geo. W. Lindsey	1931 Forest St., Denver	Clay
North Golden Clay	Golden	Denver Fire Brick Co.	2301 Blake St., Denver	Fire Clay
Geo. W. Parfet Est. Inc.	Golden	Geo. W. Parfet Estate, Inc.	Linder Block, P. O. Box 266, Golden	Clay
H. M. Rubey Clay Co.	Golden	Geo. W. Parfet Estate, Inc.	Linder Block, P. O. Box 266, Golden	Clay
South Golden Clay Mine	Golden	Denver Fire Brick Co.	2301 Blake St., Denver	Fire Clay
Strainland	Golden	Denver Sewer Pipe & Clay Co.	4501 Fox Street, Denver	Fire Clay

OPERATING CLAY MINES AND PITS IN LAS ANIMAS COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
New Mary	Trinidad	Trinidad Brick & Tile Co.	Trinidad	Clay

OPERATING CLAY MINES AND PITS IN PUEBLO COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Chamblin	Capers Spur	Standard Fire Brick Co.	24th & Albany, Pueblo	Fire Clay
Early Bird	Stone City	Coleman & Freeman	403 1/2 Main St., Canon City	Fire Clay
Nellie Helen	Stone City	Arthur L. Wands	Stone City	Clay
Pueblo Clay Products No. 1	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Pueblo Clay Products No. 2	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Pueblo Clay Products No. 3	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Pueblo Clay Products No. 4	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Rock Creek	Rock Creek	Standard Fire Brick Co.	24th & Albany, Pueblo	Fire Clay

OPERATING MILLS, PLANTS AND SMELTERS BOULDER COUNTY, 1953

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Clyde & Gale.....	5 mi. W. Nederland	Elmer Ford.....	Nederland	Tungsten
Cross Washer Plant.....	3 mi. NE Nederland	Tom Linger & Geo. A. Menger.....	Nederland	Tungsten
Lakewood Mill.....	Lakewood	Cobb & Weldon.....	401 Pine St., Boulder	Tungsten
Lindsey Washer.....	Nederland	Geo. Lindsey.....	Boulder	Tungsten
Marion Mill.....	Sugarloaf	Boulder Tungsten Mines, Inc.....	% Geo. Teal, Box 37, Boulder	Tungsten
Prospect Screening Plant.....	Nederland	W. G. Ford.....	Box 150, Boulder	Tungsten
Pastore Washer.....	Nederland	Pastore & Co.....	1946 Walnut Street, Boulder	Tungsten
Valmont.....	Valmont	Gen I. Chemical & Dye Corp.....	Box 228, Boulder	Fluorspar
Wano Mill.....	Jamestown	Ozark-Mahoning Co.....	Jamestown	Fluorspar
Wolftongue Mill.....	Nederland	Hetzer Mines Co., Inc.....	Box 150, Boulder	Tungsten

OPERATING MILLS, PLANTS AND SMELTERS CHAFFEE COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Calcium Mill.....	Salida	Calcium Company.....	Box 910, Salida	Calcium
Granite Finishing Plant.....	Salida	Colorado Granite Co.....	Salida	Granite
Monarch Crushing Plant.....	Monarch	Colorado Fuel & Iron Corp.....	Garfield	Limestone
Reynolds Mill.....	Salida	Reynolds Mining Corp.....	Box 169, Salida	Fluorspar
Western Feldspar Mill.....	Salida	Western Feldspar Milling Co.....	Box 671, Salida	Feldspar

OPERATING MILLS, PLANTS AND SMELTERS CLEAR CREEK COUNTY, 1953

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Dixie Mill.....	Idaho Springs	LeRoy Giles & Co.....	Idaho Springs	Gold
Front Range Mill.....	Dumont	Front Range Mg. Co., Inc.....	Burns Vault Bldg, Denver	Lead, Zinc
Lamertine Mill.....	Idaho Springs	Lamertine Mines Co.....	% Chas Anderson, Idaho Springs	Lead, Zinc
Lupton Mill.....	Georgetown	Lupton Mining Co.....	Georgetown	Lead, Zinc
Silver Spruce Mill.....	Idaho Springs	Silver Spruce Gold Mg. Co.....	Idaho Springs	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS COSTILLA COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Mesita Hill Plant.....	2 mi. W. Mesita	Colorado Aggregate Co., Inc.....	Mesita	Volcanic Cinder

OPERATING MILLS, PLANTS AND SMELTERS DENVER COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Chemical Plant.....	Denver	{ General Chem. Division Allied Chemical & Dye Corp..... }	1271 W. Bayard, Denver.....	Sulfuric Acid
Globeville Plant.....	Globeville		40 Rector St., N. Y. 6, N. Y.	
International Mineral & Chemical Corp.....	Denver	American Smelting & Ref. Co.....	120 Broadway, New York 5, N. Y.	Cadmium, etc.
		International Mineral & Chemical Corp.....	1333 W. Maple, Denver.....	Feldspar

OPERATING MILLS, PLANTS AND SMELTERS DOLORES COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Rico Argentine Mill.....	Rico	Rico Argentine Mining Co.....	Rico	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS EAGLE COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Empire Zinc Mill.....	Gilman	{ New Jersey Zinc Co..... Empire Zinc Div..... }	Gilman	Lead, Zinc
			160 Front St., N. Y. 38, N. Y.	

OPERATING MILLS, PLANTS AND SMELTERS FREMONT COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Canon Crushing Plant.....	Canon City	Colonna & Co. of Colo.....	P. O. Box 387, Canon City.....	Terrazzo
Empire Zinc.....	Canon City	New Jersey Zinc Co. Empire Zinc Div.....	Canon City.....	Zinc
Portland Cement Plant.....	Portland	Ideal Cement Co.....	Portland, Colo., or Denver Nat'l. Bank Bldg., Denver.....	Cement
Portland Plaster Mill.....	Portland	Ideal Cement Co.....	Nat'l. Bank Bldg., Denver.....	Plaster

OPERATING MILLS, PLANTS AND SMELTERS GARFIELD COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Oil Shale Plant.....	Rifle	U. S. Bureau of Mines.....	New Customhouse, Denver.....	Oil Shale
U. S. Vanadium Rifle Mill.....	Rifle	U. S. Vanadium Co.....	Rifle	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS GUNNISON COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Carter Mill.....	Ohio City	Kanarado Mng. & Dev. Co.....	500 Summer Ave., Littleton.....	Lead, Zinc
Keystone Mill.....	Crested Butte	Western Knapp Engineering Co.....	764 Folsom Street, San Francisco, Calif.....	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS JACKSON COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Northgate	Northgate	Ozark-Mahoning Co.	Cowdery	Fluorspar

OPERATING MILLS, PLANTS AND SMELTERS JEFFERSON COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Lyon's Plant	Arvada	Beryl Ores Co.	Arvada	Beryl

OPERATING MILLS, PLANTS AND SMELTERS LAKE COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Arkansas Valley Smelter	Leadville	American Smelting & Ref. Co.	Leadville	Gold, Silver, Lead
Climax Mill	Climax	Climax Molybdenum Co.	Climax	Moly. Tin, Tungsten
Resurrection Mill	Calif. Gulch	Resurrection Mining Co.	Leadville	Lead, Zinc
Roberts Mill	Hamm Mill Site	J. H. Roberts	128 E. 9th St., Leadville	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS LA PLATA COUNTY, 1953

Name of Mill or Plant	Location	Operator	P. O. Address	Product
V. C. A. Durango Plant	Durango	Vanadium Corp. of America	Durango	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS LARIMER COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
La Porte Plant	La Porte	Ideal Cement Co.	Denver Nat'l. Bank Bldg., Denver	Cement

OPERATING MILLS, PLANTS AND SMELTERS MESA COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
A. E. C. Plant	Grand Junction	Atomic Energy Commission	Grand Junction	Experimental
Climax Uranium Co. Plant	Grand Junction	Climax Uranium Co.	P. O. Box 867, Grand Junction	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS MINERAL COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Emperius Mill	Creede	Emperius Mining Co.	Creede	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS MONTROSE COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
U. S. V. Uravan Plant.....	Uravan	U. S. Vanadium Company.....	Uravan	Uranium, Vanadium
V. C. A. Naturita Plant.....	Naturita	Vanadium Corp. of America.....	Durango	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS OURAY COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Camp Bird Mill.....	Ouray	King Lease, Inc.....	Ouray	Lead, Zinc, Copper
Idarado Mill.....	Ouray	Idarado Mining Co.....	Ouray	Lead, Zinc, Copper
Silver Shield Mill.....	Ouray	Colvin Mining & Milling Co.....	Ouray	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS PUEBLO COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Mica Grinding.....	Colo. Springs	International Mineral & Chem. Corp.....	330 W. D St., Pueblo..... 20 N. Wacker Dr., Chicago, Ill. }	Mica

OPERATING MILLS, PLANTS AND SMELTERS SAGUACHE COUNTY, 1953

Name of Mill or Plant	Location	Operator	P. O. Address	Product
La Garita Mill.....	Crystal Hill	La Garita Mines.....	Box 61, La Garita	Gold
Saguache Smelting	Saguache	Saguache Smelting Co.....	Box 246, Saguache	Lead, Zinc Under Construction

OPERATING MILLS, PLANTS AND SMELTERS SAN JUAN COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Pride Mill.....	Silverton	Pride Mill Associates.....	Silverton	Lead, Zinc, Copper
Shenandoah Dives & Silver Lake Mill.....	Silverton	Shenandoah Dives Mining Co.....	Silverton	Lead, Zinc
Venture Mill.....	Silverton	Venture Leasing Co.....	Silverton	Lead, Zinc
Yukon Mill.....	N. of Silverton	Williams & Walby.....	Silverton	Tungsten

OPERATING MILLS, PLANTS AND SMELTERS SAN MIGUEL COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Bachelor Corp. Mill.....	Placerville	Monarch Mining Co.....	Telluride	Lead, Zinc
Silver Bell Mill.....	Ophir	Silver Bell Mining Co.....	Ophir	Lead, Zinc
Telluride Mines Mill.....	Telluride	Telluride Mines, Inc.....	Telluride	Lead, Zinc
				Tungsten

OPERATING MILLS, PLANTS AND SMELTERS SUMMIT COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Plymouth Mill.....	Montezuma	John M. Jeffery.....	Montezuma	Lead, Zinc
Chatauqua	Montezuma	Sally Barber Mng. Co.....	% Mike Vinson, Breckenridge.	Lead, Zinc, Gold, Silver

OPERATING MILLS, PLANTS AND SMELTERS TELLER COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Carlton Mill.....	Victor	Golden Cycle Corp.....	Box 47, Victor.....	Gold

OPERATING PLACERS IN ADAMS COUNTY, 1953

Name of Placer	Location	Operator	P. O. Address	Product
Plants 8, 10 & R.....	Denver	Brannan Sand & Gravel.....	4800 Brighton Blvd., Denver..	Gold
Cooley Gravel Co.....	Denver	Cooley Gravel Co.....	6101 Lowell Blvd., Denver 12..	Gold
Kerkling & Slensker.....	Denver	Kerkling & Slensker.....	101 Brentwood, Lakewood.....	Gold

OPERATING PLACERS IN CHAFFEE COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Gold Bottom & Columbine..	Lost Canon.....	La Plata Mng. & Dev. Co.....	1434 North Walnut, Colorado Springs.....	Gold
John Howard.....	Lost Canon.....	A. W. Platt.....	1216 Harrison Avenue, Leadville	Gold
Mamme Jewel.....	Little Lost Canon.....	Frank Dunvan.....	Walden	Gold

OPERATING PLACERS IN CLEAR CREEK COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Cooper	W. Idaho Springs.....	Spanish Bar Mines Co.....	Central City.....	Gold
White Horse.....	Union Mining Dist.	Glen L. Fielker.....	Box 227-L, RR. 3, Denver 16...	Gold

OPERATING PLACERS IN FREMONT COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Jay Hill.....	Wellsville	C. C. Galbraith	812 Jackson Street, Pueblo.....	Gold

OPERATING PLACERS IN JEFFERSON COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Plant 11.....	Wheatridge	Brannan Sand & Gravel.....	4800 Brighton Blvd., Denver..	Gold
Rio Grande Gravel Co.....	Denver	Rio Grande Gravel Co.....	44th & Eldridge Street, Golden	Gold

ROAD WORK, TUNNELS AND DAMS—1953

BOULDER COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Boulder Supply Canal.....	Boulder Lyons.....	Bales & Kite.....	Kansas City, Mo.....	Canal
Highway	Boulder Canon.....	Lowdermilk Bros.....	1950 W. Dartmouth Ave., Englewood	Highway
Highway	Lyons	Peter Kiewit Sons Co.....	1950 So. Colo. Blvd., Denver...	Highway
Highway	Boulder & Jeffer- son Counties.....	Brown Construction Co.....	1530 E. Alriendo Ave., Pueblo	Highway

EL PASO COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Colo. Springs- Monument	Henry Shore Company.....	Littleton	Highway
So. Suburban Dam.....	Seven Falls Area..	Douglas Jardine.....	121 E. Pikes Peak, Colorado Springs.....	Reservoir

FREMONT COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Canon City & Guffey	Fremont Co. Comm'r.....	Canon City.....	Highway
Highway	Sedalia to Wood- land Park.....	Platt Rogers.....	Box 153, Pueblo.....	Highway

GARFIELD COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Rifle & Puleson.....	Rifle	E. G. Rippey & Sons.....	New Castle.....	Highway
Rifle Project.....	Rifle to Grand Valley	Schmidt Construction Co.....	Box 66, Grand Junction.....	Highway

GRAND COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
St. Louis Water Tunnel.....	Fraser	Mattery Construction Co.....	Ft. Collins.....	Water Tunnel

ROAD WORK, TUNNELS AND DAMS—1953—Continued

LAKE COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Leadville Drainage Co.	Leadville	Davis & Webb	143 W. 8th St., Leadville	Tunnel

LA PLATA COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Hesperus	Schmidt Construction Co.	Grand Junction	Highway
Highway	Bayfield	Brown Construction Co.	Pueblo	Highway

MONTROSE COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Naturita	Peter Kiewit Sons Co.	1950 So. Colo. Blvd., Denver	Highway
Highway	Naturita to Uravan	Colo. Constructors, Inc.	725 W. 39th Avenue, Denver	Highway

PARK COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Blue River Project	11 Mile Canyon	Beer Coal & Mazzocco Construction Co.	Florence	Dam & Pump Station
Blue River Tunnel	Grant	Denver Board of Water Comm'rs.	City & County Bldg., Denver	Water Diversion Tunnel

SAN JUAN COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Top Red Mtn. Pass So.	Peter Kiewit Sons Co.	1950 So. Colo. Blvd., Denver	Highway

SAN MIGUEL COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Slick Rock Hill	Lowdermilk Bros.	1950 W. Dartmouth Ave., Englewood	Highway
Highway	Placerville to Telluride	Colo. Constructors, Inc.	725 W. 39th Ave., Denver	Highway
Highway	Telluride	Peter Kiewit Sons Co.	1950 So. Colo. Blvd., Denver	Highway

SUMMIT COUNTY

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Dillon	Siegrist Construction Co.	7000 York Street, Denver	Highway

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